

FM 4-02 (FM 8-10)

FORCE HEALTH PROTECTION IN A GLOBAL ENVIRONMENT

HEADQUARTERS, DEPARTMENT OF THE ARMY

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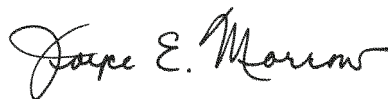
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FORCE HEALTH PROTECTION IN A GLOBAL ENVIRONMENT

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PREFACE

This field manual (FM) provides the keystone doctrine for force health protection (FHP) in a global environment (FHPGE) in support of the Force Projection Army. Force health protection in a global environment is the overarching concept of support for providing timely medical support to the tactical commander; it is executed by the health service support (HSS) system. It discusses the current HSS force structure modernized under the Department of the Army (DA)-approved Medical Reengineering Initiative (MRI) and Force XXI redesign initiatives. This publication further addresses future capabilities and requirements.

As the Army's keystone FHPGE doctrine statement, this publication identifies functions and procedures essential for operations covered in other Army Medical Department (AMEDD) functional area and reference manuals. This publication depicts HSS operations from the point of injury, illness, or wounding through successive levels of care within the theater and evacuation to the continental United States (CONUS) support base. It presents a stable body of operational doctrine rooted in actual military experience and serves as a foundation for the development of tactics, techniques, and procedures manuals. It also provides information on homeland security, antiterrorism, and force protection.

This publication is for use by HSS commanders and their staffs, command surgeons, and nonmedical unit commanders and their staffs. It is to be used as a guide in obtaining as well as providing HSS in a theater of operations (TO). Information in this publication is applicable to the full spectrum of military operations. It is compatible with the Army's combat service support (CSS) doctrine in support of the Force Projection Army and is in consonance with Joint Health Service Support (JHSS) Vision and doctrine as provided in Joint Publication 4-02.

This publication implements or is in consonance with the following North Atlantic Treaty Organization (NATO) Standardization Agreements (STANAGs), American, British, Canadian, and Australian (ABCA) Quadripartite Standardization Agreements (QSTAGs), and Quadripartite Advisory Publication (QAP) 82, *ABCA Armies Medical Interoperability Handbook*.

TITLE	STANAG	QSTAG
Identification of Medical Materiel to Meet Urgent Needs		248
Blood Supply in the Area of Operations		815
Identification of Medical Materiel for Field Medical Installations	2060	248
Emergency War Surgery	2068	322
★Medical Employment of Air Transport in the Forward Area	2087	
NATO Table of Medical Equivalents—AMedP-1(E)	2105	
Multilingual Phrase Book for Use by the NATO Medical Services—AMedP-5(B)	2131	

TITLE	STANAG	QSTAG
Documentation Relative to Medical Evacuation, Treatment, and Cause of Death of Patients	2132	470
Regulations and Procedures for Road Movements and Identification of Movement Control and Traffic Control Personnel and Agencies—AMovP-1	2454	
Orders for the Camouflage of the Red Cross and Red Crescent on Land in Tactical Operations	2931	
Medical Requirements for Blood, Blood Donors and Associated Equipment	2939	
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The proponent of this publication is the United States (US) Army Medical Department Center and School (USAMEDDC&S). Send comments and recommendations in a letter format directly to **Commander, USAMEDDC&S, ATTN: MCCS-FCD-L, 1400 East Grayson Street, Fort Sam Houston, Texas 78234-5052**, or at e-mail address: Medicaldoctrine@amedd.army.mil. All recommended changes should be keyed to the specific page, paragraph, and line number. A rationale should be provided for each recommended change to aid in the evaluation of that comment.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

The AMEDD is in a transitional phase with terminology. This publication uses the most current terminology; however, other FM 4-02-series and FM 8-series may use the older terminology. Changes in terminology are a result of adopting the terminology currently used in the joint and/or NATO and ABCA Armies publication arenas. Therefore, the following terms are synonymous—

- Health service support and combat health support (CHS).
- Health service logistics (HSL) and combat health logistics (CHL).
- Levels of care, echelons of care, and roles of care.

CHAPTER 1

FORCE HEALTH PROTECTION

1-1. Overview

Force health protection is comprised of the military health system's (MHS) capabilities to deliver health care across the continuum of military operations. Force health protection encompasses the pillars of a healthy and fit force, casualty prevention, and casualty care and management.

1-2. Joint Vision 2020

Joint Vision 2020 promulgated by the Chairman, Joint Chiefs of Staff (CJCS), provides the overarching guidance to synchronize the efforts of each Service in doctrine, organizational design, capabilities, and requirements for future operations. In a resource constrained environment, Joint Vision 2020 maximizes the individual Service contribution, leverages technology, and channels human vitality and innovation to effectively accomplish the joint mission.

1-3. Joint Health Service Support Vision

a. The JHSS Vision is currently under revision to support the new Joint Vision 2020. It will describe how the MHS will support and perform health care delivery across the full spectrum of military operations. The JHSS Vision is the conceptual framework for developing and providing medical services to support the combatant commander's warfighting mission. It provides the focus for the Services, commands, and defense health agencies to ensure a unity of effort by all participants in accomplishing the health care delivery mission.

b. One of the keys of the previous JHSS concept was to provide *definitive care* in the TO and to return the greatest number of soldiers to duty as possible within the stated theater evacuation policy. In order to support force projection operations, to decrease the size of the medical footprint within the theater, and to provide FHP during military operations other than war (MOOTW), the concept has shifted to providing *essential care* within the theater and to medically evacuate patients to CONUS or another safe haven for definitive care. Returning soldiers to duty within the stated theater evacuation policy is still a key element of the JHSS concept, but it is recognized that with a shortened evacuation policy (7 days in the combat zone [CZ] and 15 in echelons above corps) the number of soldiers able to return to duty (RTD) will be decreased and a stronger reliance on timely medical evacuation with en route medical care will be required. For a discussion of definitive versus essential care and the Joint Readiness Clinical Advisory Board (JRCAB) Deployable Medical Systems (DEPMEDS) Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs, refer to Appendix A. To obtain a copy of the JRCAB DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs, go to the JRCAB website at: <http://www.armymedicine.army.mil/jrcab/d-prod.htm>.

1-4. Healthy and Fit Force

In a constrained resource environment, a healthy and fit force is essential to ensure mission accomplishment and to maximize the effectiveness of limited manpower. Starting with entry into the Army and continuing

through to separation or retirement the promotion of wellness, emphasis on physical and mental fitness, and occupational and environmental health (OEH), strengthen the human component of the warfighter's weapons system. An aggressive wellness component of the JHSS strategy promotes quality of life and decreases demand for expensive curative health care. Moreover, stronger, more fit soldiers are less likely to be injured accidentally, more readily withstand exposure to disease and stress, and promptly heal from wounds or injuries.

1-5. Casualty Prevention

The second pillar of JHSS Vision concerns both the enemy threat and the medical threat. The enemy threat produces combat casualties and is dependent upon the types of weapons used, the will of the enemy to fight, and other operational concerns. The medical threat, which has historically caused the most significant combat ineffectiveness is comprised of disease and nonbattle injuries (DNBI). To counter the medical threat, comprehensive medical and OEH surveillance activities, preventive medicine (PVNTMED) measures (such as immunizations, pretreatments, chemoprophylaxis, and barrier creams), and field hygiene and sanitation combined with personal protective measures (such as the correct wear of the uniform and the use of insect repellent, sun screen, and insect netting) must be instituted and receive command emphasis. These activities must be conducted continuously—during mobilization, predeployment, deployment, postdeployment, and demobilization. For additional information on the medical threat and PVNTMED (casualty prevention) refer to Chapter 5, Appendix B, and Appendix E.

1-6. Casualty Care and Management

The third pillar of the JHSS Vision is casualty care and management. To implement this strategy and to support operational scenarios across the full spectrum of military operations, medical units must be smaller, lighter, more flexible (to allow for force tailoring), and more mobile. The components of casualty care and management are first response, prehospitalization treatment, forward resuscitative surgery, tailorable hospital care, and en route care (Figure 1-1).

a. First Response. First response is defined as the initial, essential stabilizing medical care rendered to wounded, injured, or ill soldiers at the point of initial injury or illness. The first responder is the first individual to reach a casualty and provide either first aid, enhanced first aid, or emergency medical treatment (EMT). First aid can be performed by the casualty (self-aid) or another individual (buddy aid), while enhanced first aid is provided by the combat lifesaver (CLS). The first person who has medical military occupational specialty (MOS)-training is the trauma specialist. He provides EMT for life-threatening trauma and stabilizes the patient for evacuation to the battalion aid station (BAS). This timely stabilizing care is required to increase survivability, decrease morbidity and mortality, enhance the prognosis of recovery, and minimize long-term disability.

b. Forward Resuscitative Surgery. Forward resuscitative surgery is the initial emergency resuscitative surgery coupled with life- and limb-saving actions, provided in forward areas. The location of the facility is dependent upon mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC) and support requirements (such as, the Army forward

surgical team [FST] must collocate with a medical company to provide necessary x-ray and medical laboratory support). It focuses on specific lifesaving practices and preparation for further evacuation for specific categories of injuries. It is not intended to be a substitute for hospital-level care. Medical conditions which warrant forward resuscitative surgery include interventions for severe uncontrolled bleeding, airway compromise, life-threatening chest injuries, and some soft tissue and orthopedic injuries.

c. *Theater Hospitalization.* Theater hospitalization will consist of one modularly designed hospital. This hospital is tailorable and can be deployed as functional modules permitting the capability to be increased incrementally as required. The future hospital will have four functional elements—initial response, mobile breakout, core, and mature theater. These four elements when deployed as a whole form a single hospitalization facility, while simultaneously possessing the capability to independently perform as separate entities. As an example, the initial element would most likely include an operating room (OR) module, intensive care module, evacuation liaison, and limited diagnostic capability (x-ray and laboratory services). As the theater matures and lift is available for follow-on modules, the HSS commander would deploy these elements in the appropriate number and mix to accomplish the mission. The breakout element allows the theater hospital to be employed and function in a split-based mode.

d. *En Route Care.*

(1) There are three major goals for en route care—ensure patients are properly prepared by providing essential care prior to evacuation; ensure the medical evacuation system is able to transport/evacuate critically ill or injured patients on any available mode of transportation; and preserve (retain) forward deployed medical personnel.

(2) The en route care team must be flexible and able to use a variety of modes of transportation. The important impact of operational factors on en route care, such as the mode of transportation, operational range (time and distance factors), space and lift limitations, and tactical considerations must be considered at each level of planning and implementation of en route care.

(3) En route care teams will leverage technological advances in communications, computers, and medical equipment to facilitate and enhance medical treatment provided to patients while they are en route to or from a facility.

(4) The essential care initiated to stabilize patients prior to medical evacuation must not be interrupted. During transport/evacuation *stabilized* patients will continue to have physiologic and hemodynamic fluctuations which necessitate close monitoring and, as required, timely intervention to ensure their conditions do not deteriorate during evacuation.

e. *Definitive Care.* Definitive care is the treatment provided to return the soldier to health from a state of injury or illness, and can be accomplished at any level depending on the specific medical condition. A soldier's disposition may range from RTD to medical discharge from the military. Definitive care is not a phase of patient treatment; it is a characterization of the type of care provided. A robust health care delivery system in CONUS to support the Army in the field is required because of the reduced medical footprint within theater and reduced medical capability (Levels I-IV) outside continental United States (OCONUS).

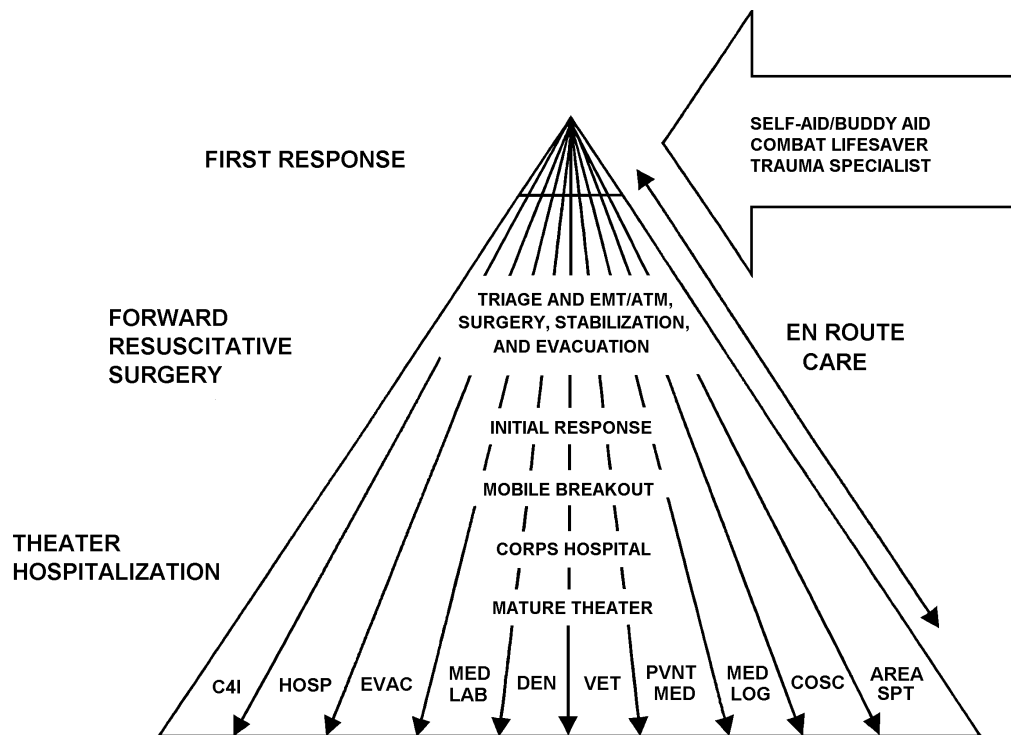


Figure 1-1. Components of the joint health service support system.

CHAPTER 2

FUNDAMENTALS OF FORCE HEALTH PROTECTION
IN A GLOBAL ENVIRONMENT**2-1. The Health Service Support System**

a. Force health protection in a global environment involves the delineation of support responsibilities by capabilities (levels of care) and geographical area (area support). The HSS system which executes the FHPGE initiatives is a single, seamless, and integrated system. It is a continuum from the forward edge of the battle area (FEBA) or point of injury or wounding through successive levels of care to the CONUS-support base.

b. The HSS system encompasses the promotion of wellness and preventive, curative, and rehabilitative medical services. It is designed to maintain a healthy and fit force and to conserve the fighting strength of deployed forces.

c. Consistent with military operations, HSS operates in a continuum across strategic, operational, and tactical levels. In addition to maintaining a healthy and fit force, the effectiveness of the HSS system is focused and measured on its ability to—

- Provide prompt medical treatment consisting of those measures necessary to recover, resuscitate, stabilize, and prepare patients for evacuation to the next level of care (paragraph 2-4) and/or RTD.

- Employ standardized air and ground medical evacuation units/resources. The use of air ambulance is the primary and preferred means of medical evacuation on the battlefield. Its use, however, is METT-TC driven and can be affected by weather, availability of resources, nuclear, biological, and chemical (NBC) conditions, and air superiority issues. Refer to FM 8-10-6 and FM 8-10-26 for additional information on medical evacuation operations.

- Provide a field flexible, responsive, and deployable hospital designed and structured to support a Force Projection Army and its varied missions. This hospital provides essential care to all patients who are evacuated out of theater and definitive care to those soldiers capable of returning to duty within the theater evacuation policy.

- Provide a HSL system (to include blood management) that is anticipatory and tailored to continuously support missions throughout full spectrum operations. Refer to paragraph 5-10 of this publication and FM 4-02.1 and FM 8-10-9 for additional information.

- Establish PVNTMED programs to prevent casualties from DNBI through medical surveillance, OEH surveillance, behavioral surveillance, health assessments, PVNTMED measures (PMM), and personal protective measures. Refer to paragraph 5-6 of this publication and Army Regulation (AR) 40-5, FM 4-02.17, FM 4-25.12, and FM 21-10 for additional information on PVNTMED services.

- Provide veterinary services to protect the health of the command through food inspection services, animal medical care, and veterinary PVNTMED. As the Department of Defense (DOD) Executive

FM 4-02

Agent, the Army provides veterinary services to the US Air Force (USAF), US Navy (USN), US Marine Corps (USMC), and Army forces, as well as other federal agencies, host nation (HN), allies, and coalition forces, when directed. For additional information on veterinary operations and activities refer to paragraph 5-8 of this publication and AR 40-70, AR 40-656, AR 40-657, AR 40-905, and FM 8-10-18.

- Provide dental services to maximize the quick RTD of dental patients by providing operational dental care (paragraph 5-7) and maintaining the dental fitness of theater forces. For additional information refer to FM 4-02.19.

- Provide combat operational stress control (COSC)/mental health (MH) to enhance unit and soldier effectiveness through increased stress tolerance and positive coping behaviors. For additional information refer to FM 6-22.5, FM 8-51, and FM 22-51.

- Provide medical laboratory functions in HSS operations to—
 - Assess disease processes (diagnosis).
 - Conduct OEH surveillance laboratory support.
 - Monitor the efficacy of medical treatment.
 - Identify and confirm use of suspect biological warfare (BW) and chemical warfare (CW) agents by enemy forces.

- Deploy command and control (C2) units capable of providing the requisite C2 to enhance split-base operations capability.

- Ensure maximum use of emerging technology to improve battlefield survivability.

d. The challenge facing the FHPGE concept is to simultaneously provide medical support to deploying forces; provide health care services to the CONUS-support base; and to establish a theater HSS system. The system provides HSS to mobilization, deployment (reception, staging, onward movement, and integration [RSO&I]), reconstitution, redeployment, and demobilization operations.

2-2. Principles of Force Health Protection in a Global Environment

The six principles of FHPGE are conformity, continuity, control, proximity, flexibility, and mobility.

a. Conformity. Conformity with the tactical plan is the most basic element for effectively providing HSS. By taking part in the development of the commander's operation plan (OPLAN), the HSS planner can—

- Determine requirements.

- Develop a comprehensive plan in support of the tactical commander's concept of operation and plan.

b. Continuity. Health service support must be continuous since an interruption of treatment may cause an increase in morbidity, mortality, and long-term disability. No patient is evacuated farther to the rear than his physical (medical) condition and/or the military situation requires.

c. Control. Technical control and supervision of HSS activities, missions, operations, and medical resources must remain with the appropriate command-level surgeon. Health service support staff officers must be proactive and keep their commanders' apprised of all health aspects (to include the medical threat) of the operation.

d. Proximity. The location where HSS assets are employed in support of combat operations is dictated by the tactical situation (METT-TC), time and distance factors, theater evacuation policy, medical troop ceiling, and availability of evacuation resources. Patients are evacuated to the medical treatment facility (MTF) or the MTF is moved to the area where the patient population is the greatest. Health service support commanders and staffs, through continuous coordination and synchronization, ensure that treatment elements or MTFs are not placed in areas that interfere with ongoing combat operations.

e. Flexibility. The HSS plan must be flexible to enhance the capability of shifting HSS resources to meet changing requirements. Changes in the tactical situation or OPLAN make flexibility essential. Since all HSS units are used somewhere within the TO and none are held in reserve, the commander makes alternate plans for redistribution of critical medical resources, as required.

f. Mobility. Mobility is required to ensure that HSS assets remain close enough to support maneuvering combat forces. The mobility and survivability (such as armor protection) of medical units organic to maneuver elements must be equal to the forces being supported. Major medical headquarters in the corps and echelon above corps (EAC) continually assess and forecast unit movement and redeployment. Through the use of organic and nonorganic transportation resources, commanders can rapidly move HSS units to best support combat operations. For example, if one unit is immobilized, a similar unit may be leapfrogged past it. An immobilized unit may be given priority in evacuating its patients as they become stabilized and its resources may be moved forward by echelon. The only means for increasing the mobility of forward deployed medical units is to evacuate the patients being held.

2-3. The Medical Threat and Medical Intelligence Preparation of the Battlefield

a. The *medical threat* is a collective term used to designate all potential or continuing enemy actions and environmental situations that may render a soldier combat ineffective. The medical threat is important because it applies (as a whole) to the troops deployed on a specific mission and/or operation and may result in the unit being unable to satisfactorily complete its mission. A *health threat* is more individualized in nature and may not be of military significance. Threats to an individual soldier's health can include genetic and/or hereditary conditions which manifest themselves in adulthood, an individual (single) exposure to a toxic industrial material (TIM) or other toxin where others are not exposed, or other allergies, diseases, injuries, and traumas which affect a single individual's health rather than the health of

the unit. For example, an individual who has a food allergy inadvertently eats the offending food; he may become incapacitated with diarrhea after the exposure. This incapacitation causes the soldier to be combat ineffective; but the remainder of the unit is not affected by his condition. However, in a unit where 40 to 50 percent of its personnel contract *Salmonella* (an infectious disease which causes diarrhea), the unit can no longer complete its mission. The significant difference in these terms lies with the effects on the ability of a military unit to successfully execute its mission. Predeployment medical screening is used to determine if an individual soldier is physically and mentally ready to be deployed; medical conditions, such as diabetes, fractures, severe sprains, or other diseases and injuries, can disqualify the individual from being deployed. Soldiers who are deployed are healthy, fit, and emotionally prepared for the deployment; the medical threat they are to face in the area of operations (AO) is operationally significant as it affects the entire unit, rather than the individual soldier.

b. The medical threat is comprised of the following categories:

- Occupational and environmental health hazards such as TIMs and noise. This category also includes climatic injuries resulting from inadequate acclimation to the AO and inadequate clothing and equipment for the environmental conditions.
- Endemic and epidemic diseases in the AO include diseases of military significance, diarrheal diseases caused by drinking contaminated or impure water (not adequately treated), eating contaminated foods, and not practicing good individual and unit PMM. These diseases may also be the result of disease transmission by arthropod vectors.
- Diseases and injuries caused by contact with domesticated animals, wild animals, reptiles, and poisonous or toxic plants (flora and fauna).
- Diseases and injuries caused by physical or mental unfitness resulting from continuous operations, inadequate diet, and mental stressors.
- Diseases and injuries resulting from exposure to NBC weaponry to include BW and CW agents and high yield explosive weapons.

c. Medical intelligence preparation of the battlefield (MIPB) is a systematic process (Appendix B) that is designed to aid HSS planners in analyzing various enemy and medical threats in a specific AO. The MIPB is the initial step in the mission analysis phase of the deliberate planning process. The information derived from conducting proper MIPB is the cornerstone to developing detailed and effective HSS plans and estimates. The purpose of MIPB is to—

- Define the battlefield environment.
- Describe the battlefield effects on deployed forces and HSS operations.
- Conduct threat integration (enemy/medical) and information consolidation.

d. For additional information on the medical threat and medical intelligence, refer to Appendix B of this manual and FM 4-02.7, FM 4-02.17, FM 8-10-8, and FM 8-42.

2-4. Levels of Medical Care

A basic characteristic of organizing modern HSS is the distribution of medical resources and capabilities to facilities at various levels of location and capability, which are referred to as *levels*. Echelonment is a matter of principle, practice, and organizational pattern; not a matter of rigid prescription. Scopes and functions may be expanded or contracted on sound indication. As a general rule, *no level will be bypassed* except on grounds of efficiency or battlefield expediency. The rationale for this rule is to ensure the stabilization/survivability of the patient through advanced trauma management (ATM) and far forward resuscitative surgery prior to movement between MTFs (Levels I through III). (A discussion on the phases of patient treatment is contained in Appendix C.)

a. Level I. The first medical care a soldier receives is provided at Level I (also referred to as unit-level medical care). This level of care includes—

- Immediate lifesaving measures.
- Disease and nonbattle injury prevention.
- Combat operational stress control preventive measures.
- Patient location and acquisition (collection).
- Medical evacuation from supported units (point of injury or wounding, company aid posts, or casualty collecting points [CCP]) to supporting MTFs.
- Treatment provided by designated trauma specialists or treatment squads (BASs). (Major emphasis is placed on those measures necessary for the patient to RTD, or to stabilize him and allow for his evacuation to the next level of care. These measures include maintaining the airway, stopping bleeding, preventing shock, protecting wounds, immobilizing fractures, and other emergency measures, as indicated.)

(1) Nonmedical personnel performing first-aid procedures assist the trauma specialist in his duties. First aid is administered by an individual (self-aid, buddy aid) and by the CLS.

(a) *Self-aid and buddy aid.* Each individual soldier is trained to be proficient in a variety of specific first-aid procedures. These procedures include aid for chemical casualties with particular emphasis on lifesaving tasks. This training enables the soldier or a buddy to apply first aid to alleviate a life-threatening situation.

(b) *Combat lifesaver.* The CLS is a nonmedical soldier selected by his unit commander for additional training beyond basic first-aid procedures. A minimum of one individual per squad, crew, team, or equivalent-sized unit should be trained. The primary duty of this individual does not change. The additional duty of the CLS is to provide enhanced first aid for injuries based on his training before the trauma specialist arrives. Combat lifesaver training is normally provided by medical personnel assigned, attached, or in direct support (DS) of the unit. The senior medical person designated by the commander manages the training program. Urban operations (UO) may require a heavier reliance on CLSs due to the

isolating effects of urban areas. Before engaging in this type of operation, training of additional CLSs may be prudent.

(2) Level I medical treatment is provided by the trauma specialist and emergency care specialist or by the physician, the physician assistant (PA), or the health care specialist in the BAS. In Army special operations forces (ARSOF), Level I treatment is provided by special operations combat medics (SOCMs), special forces medical sergeants (SFMSs), or physicians and PAs at forward operating bases (FOBs), special forces (SF) operating bases (SFOB), or in joint special operations task force (JSOTF) areas of responsibilities (AOR).

(a) Emergency medical treatment (immediate far forward care) consists of those lifesaving steps that do not require the knowledge and skills of a physician. The trauma specialist is the first individual in the HSS chain who makes medically-substantiated decisions-based on medical MOS-specific training.

(b) At the BAS, the physician and the PA in a treatment squad are trained and equipped to provide ATM to the battlefield casualty. This element also conducts routine sick call when the tactical situation permits. Like elements provide this level of medical care to brigades, division, corps, and EAC units.

b. Level II.

(1) At this level (also referred to as division-level), care is rendered at the Level II MTF which is operated by the treatment platoon of divisional and nondivisional medical companies/troops. Here the patient is examined and his wounds and general medical condition are evaluated to determine his treatment and evacuation precedence, as a single patient among other patients. Advanced trauma management and EMT including beginning resuscitation is continued, and, if necessary, additional emergency measures are instituted, but they do not go beyond the measures dictated by immediate necessities. The Level II MTF has the capability to provide packed red blood cells (RBCs) (liquid), limited x-ray, laboratory, and dental support.

(2) Level II HSS assets are located in the—

- Division (forward support medical company [FSMC], main support medical company [MSMC]), and medical company-sized units in the separate brigades and armored cavalry regiments (ACRs) in the Army of Excellence (AOE).
- Division support medical company (DSMC) in the digitized force.
- Brigade support medical company (BSMC) in the Stryker brigade combat team (SBCT).
- Division troop support medical company (DTSMC) or division air cavalry medical company (DACMC), and aviation support medical company (AVSMC) in the interim division (IDIV).
- Area support medical company in the corps and EAC.

(3) Preventive medicine and COSC assets are also located in the MSMC, DSMC, BSMC, and area support medical company (ASMC).

(4) Those patients who can RTD within 1 to 3 days are held for treatment. Patients who are nontransportable due to their medical condition may require resuscitative surgical care from a FST collocated with a medical company/troop. (A discussion of the FST is contained in FM 8-10-25.)

(5) This level of care provides medical evacuation from Level I MTFs and also provides Level I medical treatment on an area support basis for units without organic Level I resources.

c. Level III. At Level III, the patient is treated in an MTF staffed and equipped to provide care to all categories of patients, to include resuscitation, initial wound surgery, and postoperative treatment. This level of care expands the support provided at Level II. Patients who are unable to tolerate and survive movement over long distances receive surgical care in a hospital as close to the division rear boundary as the tactical situation allows. This level includes provisions for—

- Evacuating patients from supported units.
- Providing care for all categories of patients in an MTF with the proper staff and equipment.
- Providing support on an area basis to units without organic medical assets.

d. Level IV. Depending upon the anticipated duration of the operation, the mission of deployed forces, and other METT-TC factors, Level IV units and facilities may not be located within the TO. If Level IV resources are deployed, the patient is treated in a hospital staffed and equipped for general and specialized medical and surgical care to stabilize the patient for further evacuation out of the theater or for preparation for RTD within the stated theater evacuation policy.

e. The Continental United States Support Base (Level V). Level V medical care is found in support base hospitals. Mobilization requires expansion of military hospital capacities and the inclusion of Department of Veterans Affairs (VA) and civilian hospital beds in the HSS system to meet the increased demands created by the evacuation of patients from the TO. The support-base hospitals represent the most definitive medical care available within the HSS system.

2-5. Planning for Global Force Health Protection Operations

a. Force projection is the ability to rapidly alert, mobilize, stage, deploy, and operate anywhere in the world. The President and the Secretary of Defense (SECDEF) direct force projection operations responding to specific circumstances affecting US national interests. The primary military organization that conducts tactical operations as part of force projection is the joint task force (JTF). Within a JTF, the corps or a major subelement of it (a division) is the principal Army force projection entity because it contains the C2, combat, combat support (CS), and CSS assets necessary to execute the force projection mission. The basic tenets of FHPGE in support of force projection forces involve strict adherence to the AMEDD battlefield rules listed in the order of precedence in Table 2-1.

Table 2-1. Army Medical Department Battlefield Rules

BE THERE (MAINTAIN A MEDICAL PRESENCE WITH THE SOLDIER)
MAINTAIN THE HEALTH OF THE COMMAND
SAVE LIVES
CLEAR THE BATTLEFIELD OF CASUALTIES
PROVIDE STATE-OF-THE-ART MEDICAL CARE
ENSURE EARLY RETURN TO DUTY OF THE SOLDIER

b. Health service support units must be able to mobilize, deploy, and support a crisis-response force. Commanders task organize HSS assets on the basis of analysis of METT-TC, strategic lift, pre-positioned assets, and, depending upon the type of operation, availability of host nation support (HNS).

c. During the initial stages of establishing a CSS base, it may become necessary to perform HSS operations in one or more areas simultaneously. With secure lines of communications (LOCs) and signal/satellite communications capabilities, the medical unit may provide support from an intermediate staging base (ISB), a lodgment area, at CONUS installations, or afloat. Army MTFs will be able to provide diagnostic and consultative services to forward-deployed forces. Enhanced telecommunications capability also reduces the requirement to employ medical specialty physicians into forward deployed MTFs (this is accomplished through telementoring and teleconsultation). It permits strategic managers to centralize critical professional skills and services. In force projection operations in remote areas, Level III facilities may be located in a safe haven or CONUS-support base. Telecommunications provide a link between the forward operating forces and the medical specialties contained in the Level III and above facilities.

d. Force health protection in a global environment considerations include—

(1) *Strategic considerations.* Strategic HSS and supportive services include activities under the control of DA, DOD, and SECDEF. These include depots, arsenals, data banks, plants, research laboratories, and factories associated with the US Army Medical Research and Materiel Command (USAMRMC) (including the US Army Medical Materiel Agency [USAMMA], and DNBI surveillance centers (such as US Army Centers for Health Promotion and Preventive Medicine [USACHPPM]), the Defense Logistics Agency (DLA), National Inventory Control Point (NICP), MHS, and VA and civilian hospital systems of the National Disaster Medical System (NDMS). Strategic HSS focuses on—

- Supporting force deployment by ensuring soldier medical readiness.
- Medical surveillance and OEH surveillance.

- Early employment/deployment of PVNTMED and veterinary services.
- Medical laboratory services for in-theater confirmatory identification of suspect NBC samples/specimens.
- Mobilizing industrial base.
- Determining requirements and acquiring medical equipment, supplies, blood, and pharmaceuticals to support force projection operations.
- Stockpiling and pre-positioning medical materiel (pre-positioning of medical materiel configured to unit sets and afloat pre-positioning).
- Supporting the HN.
- Medical evacuation, medical regulating, and hospitalization.
- Mobilizing.
- Preserving the force by returning injured soldiers to full health.

(2) *Operational considerations.*

(a) Operational HSS encompasses all of the medical activities to support the force employed in campaigns, major operations, stability operations, and support operations. Operational HSS focuses on—

- Early entry of PVNTMED elements to reduce DNBI and to establish medical and OEH hazard surveillance activities and programs.
- Support of deployed operations (RSO&I). (Refer to FM 100-17-3 for additional information.)
- Medical treatment facilities in the theater.
- Distribution management of medical materiel, and blood and blood products.
- Support of forward deployed forces.
- Reconstitution of medical units in theater.
- Support of redeployment operations.

(b) At the operational level, managers balance current requirements with the need to extend capabilities along the LOCs and to build up support services for subsequent major operations.

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Whenever possible, planners take advantage of available HN support (infrastructure and contracted services). Within the medical arena, however, caution must be exercised when contracting for professional service, medical facilities, and medical materiel. Due to stringent government guidelines, laws, and standards on the quality of pharmaceuticals, medical equipment, and medical professional services, it is often not possible to contract for HNS in these areas. The surgeon is an essential advisor in the development of health related contracting and such contracts should not be established without his explicit approval.

(3) *Tactical considerations.*

(a) Tactical planning is proactive rather than reactive. Force health protection in a global environment must be thoroughly integrated with tactical plans and orders. Commanders reallocate medical resources as tactical situations change. Health service support commanders task organize medical support to adapt to the flow of battle and to meet reinforcement or reconstitution requirements. Elements to reconstitute attrited medical units normally come from the next higher level of care.

(b) Due to the mass destruction and disabling capabilities of modern conventional, directed energy (DE), and NBC weapons, and high yield explosives, HSS units can anticipate large numbers of casualties in a short period of time. These mass casualty situations will probably exceed the capabilities of local medical units. Medical units are flexible. They alter the normal scope of operations to provide the greatest good for the greatest number. Key factors for effective mass casualty management are on-site triage, emergency resuscitative care, early surgical intervention, reliable communications, and skillful use of standard and nonstandard air and ground evacuation platforms. (Refer to paragraph 2-9 of this publication and STANAG 2068, FM 4-02.6, and FM 8-42 for additional information on mass casualty operations.)

(c) Medical personnel may also have to defend themselves and their patients within their limitations. In certain situations, HSS units in rear areas must be able to defend against Level I threats and survive NBC strikes while continuing the operation. Refer to paragraph 4-8 for additional information on the effects of the Geneva Conventions on the issue of defense of medical units, personnel, and patients. (Refer to FM 4-02.7 for additional information on HSS in an NBC environment.)

2-6. Army Medical Department Information Management

Army Medical Department information management provides the foundation and architectural design for all information activities conducted by the AMEDD. The information environment is a global one, encompassing not only the AMEDD, but also the other Services, DOD, and other governmental departments and agencies, and HN, allied, and coalition forces. For an additional discussion on information operations refer to AR 25-1, FM 100-6 (FM 3-13), FM 101-5 (FM 5-0), and on AMEDD information management refer to FM 8-10-16.

2-7. Health Service Support for Army Special Operations Forces

Army special operations forces require support from conventional forces when their medical requirements exceed their organic capability. Comprehensive planning, coordination, and synchronization are required

to ensure prompt medical intervention by conventional resources without compromising the ARSOF mission. Due to the shortage of ARSOF personnel and criticality of MOS skills within the theater, an exception to the theater evacuation policy may be required for ARSOF to facilitate the RTD of these patients within the TO. Refer to FM 8-43 for additional information.

2-8. Global Force Health Protection Operations in a Nuclear, Biological, and Chemical Environment

The potential for the employment of NBC weaponry against a deployed US force, must be considered as a condition of the battlefield by commanders at all levels. The ease of NBC employment, the difficulty of identification and treatment, and most importantly, the publicity value of even an isolated BW or CW agent attack dictates the requirements for NBC defensive equipment, training, immunizations, chemoprophylaxis/barrier creams, and pretreatments. For an in-depth discussion of HSS operations in an NBC environment, refer to FM 4-02.7. For treatment information refer to FM 4-02.283, FM 8-9, FM 8-284, and FM 8-285.

2-9. Mass Casualty Situations

Mass casualty situations occur when the number of casualties exceeds the available medical capability to rapidly treat and evacuate them. Therefore, the actual number of casualties required before a mass casualty situation is declared varies from situation to situation depending upon the availability of HSS resources. Planning for mass casualty situations is essential. Once established, mass casualty plans should be exercised/rehearsed on a periodic basis. For information on mass casualty situations, refer to FM 4-02.6, FM 8-42, and STANAG 2068.

2-10. Risk Management

Risk management is the process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk costs with mission benefits. It applies to all missions and environments across the wide range of Army operations. Risk management is fundamental in developing confident and competent leaders and units. Proficiency in applying risk management is critical to conserving the fighting strength. Refer to Appendix D of this manual and FM 100-14 for information on the risk management process.

2-11. Health Service Support for Contractors on the Battlefield

The employment of contractors on the battlefield had its inception before the establishment of the United States Army in 1775. Since that time, in both peace and war, selected functions of CS and CSS have been entrusted to contractors. When deployed in an AO in support of military contingencies, the Army may provide HSS and other support services commensurate with those provided to DOD civilian personnel. (Refer to FM 100-21 for additional information.)

CHAPTER 3

ARMY MEDICAL DEPARTMENT TEAM
AND COMMAND SURGEONS**3-1. The Army Medical Department Team**

a. The AMEDD mission of *conserving the fighting strength* entails the integration of all aspects of HSS on the battlefield. The HSS system is comprised of functional areas which delineate clinical and support functions (medical evacuation and medical regulating, hospitalization, medical treatment [includes area medical support], PVNTMED support, dental services, veterinary services, HSL, COSC, and medical laboratory services), and medical command, control, communications, computers, and intelligence (C4I). Under the FHPGE initiative and the integrated concept team (ICT) (Appendix E) approach, these functional areas are aligned in the following groupings:

- Command, control, communications, computers, and intelligence. For additional information refer to paragraph 5-2.
- Casualty care. This grouping is comprised of the medical treatment aspects of hospitalization, area medical support, COSC/MH, dental services, clinical laboratory services, and the treatment of NBC contaminated patients. For additional information refer to paragraphs 5-3, 5-5, 5-7, 5-9, and 5-11.
- Medical evacuation and medical regulating. For additional information refer to paragraphs 5-4.
- Casualty prevention. This grouping encompasses promoting a healthy and fit force; PVNTMED (including OEH) support; medical surveillance activities (to include OEH surveillance); the preventive aspects of COSC/MH; preventive dentistry; nutrition care; veterinary support (to include the animal care mission, food inspection mission, and veterinary PVNTMED mission); medical laboratory services which support casualty prevention functions to include the identification and confirmation of suspect BW and CW agents; and the preventive aspects of NBC defense. For additional information refer to paragraphs 5-6 through 5-9.
- Medical logistics. For additional information refer to paragraph 5-10.

b. The provision of HSS on the battlefield is a complex process and requires continuous synchronization and comprehensive planning. The AMEDD has adopted a policy that the best qualified individual will be selected for leadership positions. Leaders who have trained with, have gained the confidence of, and have supported combat, CS, and CSS units in a tactical environment are more effective in planning for and executing real-world HSS missions. The issue that requires continuous synchronization is the relationship of the operational aspects of the mission (normally represented by the Medical Service Corps [MS] officer) and the clinical aspects of the mission (normally represented by a Medical Corps [MC] officer, PA, or other health care provider).

(1) The clinical aspects of the operation involve the provision of medical care to sick, injured, and wounded soldiers (or other designated beneficiaries) by medically trained individuals and the prevention of DNBI. The care extends from the place of injury or wounding and is usually provided

initially by the trauma specialist or at the BAS through the successive levels of care to the CONUS-support base, if the patient's medical condition so warrants. As the patient is evacuated between levels of care, he receives en route medical care to sustain him, thus reducing the potential for his medical condition to deteriorate while in-transit.

(2) The operational aspects of the mission include such military tasks as—

- Maintaining situational understanding (SU) on the battlefield.
- Providing timely support to the maneuver forces.
- Maintaining the unit's readiness posture.
- Ensuring the survivability of the unit (such as unit perimeter defense, hasty firing positions, and patient bunkers).
- Ensuring compliance with the Law of Land Warfare (to include the Geneva Conventions [Chapter 4]).

c. In most tables of organization and equipment (TOE) units, when the unit is not deployed on an operation or exercise, the unit is staffed with administrative personnel and only limited clinical resources. When the unit is mobilized, the professional staff designated under the Professional Filler System (PROFIS) is notified of the mobilization and is directed to report to the unit. The administrative staff that maintains the unit's readiness posture when the unit is not deployed are the individuals who have worked on a daily basis with supported maneuver units and commands. Although the TOE may indicate that an incoming officer be designated as the unit commander/platoon leader, the appointing authority may determine that the mission can best be accomplished by maintaining the same command structure that existed prior to mobilization.

d. To accomplish the AMEDD mission, a synchronization of the clinical and operational aspects must be achieved. It accomplishes nothing for a unit to provide the best clinical care, if it cannot survive the battle. Likewise, a unit that can execute all of its military tasks is not successful if the patients entrusted to its care die or their conditions deteriorate because no consideration was given to their clinical needs during an operational relocation.

e. A balance must be achieved in prioritizing the requirements generated from both the operational and clinical aspects of the mission. Without synchronizing the response to overall requirements, both operational and clinical, a short-fall in one sphere may have serious ramifications on mission success. A shortage of scalpel blades for a FST adversely impacts the patient care mission as would a shortage of ammunition for use in perimeter defense which could lead to mission failure in an operational sense. If neither item is available, the FST cannot provide the required surgical care to stabilize patients for further evacuation and the unit cannot survive on the battlefield because it lacks a means for defense.

f. To enhance the delivery of health care on the battlefield and to provide a seamless HSS system from the point of injury or wounding through progressive levels of care to the CONUS-support base, the

AMEDD team must integrate their special skills and knowledge, leverage technology, maximize the use of scarce resources, and synchronize their collective efforts. The accomplishment of the AMEDD mission necessitates a cohesive unit of effort to provide the care our soldiers deserve.

3-2. Command Surgeon

a. At all levels of command, a command surgeon is designated. This AMEDD officer is a special staff officer charged with planning for and monitoring the execution of the HSS mission. Depending upon the level of command, this officer may be dual-hatted as a HSS unit commander; further, he may have a small staff section to assist him in his planning, coordinating, and synchronizing the HSS effort within his AO.

b. The command surgeon is responsible for ensuring that all AMEDD functional areas (Chapter 5) are considered and included in OPLANs and operation orders (OPORDs). The command surgeon retains technical supervision of all HSS operations. At the higher levels of command, the scope of duties and responsibilities expand to include all subordinate levels of command.

- c.* The duties and responsibilities of command surgeons may include, but are not limited to—
- Advising the commander on the health of the command.
 - Ensuring early presence/arrival of PVNTMED resources into the TO.
 - Developing and coordinating the HSS portion of OPLANs to support the combatant/tactical commander's decisions, planning guidance, and intent.
 - Determining the medical workload requirements (patient estimates) based upon the casualty estimate developed by the Assistant Chief of Staff (Personnel) (G1) and/or Adjutant, US Army (S1).
 - Maintaining SU by coordinating for current HSS information with surgeons of the next higher, adjacent, and subordinate headquarters.
 - Recommending task organization of HSS units/elements to satisfy all mission requirements. (A discussion of the medical multifunctional task force [MMTF] and recommended augmentation staffing is provided in FM 8-55.)
 - Recommending policies concerning support of civil-military operations (CMO).
 - Monitoring the availability of and recommending the assignment, reassignment, and utilization of AMEDD personnel within his AO.
 - Developing, coordinating, and synchronizing health consultation services (to include telemedicine and teleconsultation, as appropriate).

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- Evaluating and interpreting medical statistical data.
- Recommending policies and determining requirements and priorities for HSL (to include blood and blood products, medical supply/resupply, medical equipment maintenance and repair services, production of medicinal gases, optometric support, and fabrication of single- and multi-vision optical lens, and spectacle fabrication and repair).
- Recommending medical evacuation policies and procedures.
- Monitoring medical regulating and patient tracking operations.
- Determining HSS training policies and programs (to include CLS, unit field sanitation team, MOS 91W refresher training, and training on the administration of pain medication (paragraph 3-1d below)).
- Developing policies, protocols, and procedures pertaining to the medical and dental treatment of sick, injured, and wounded personnel. These policies, protocols, and procedures will be in consonance with applicable regulations, directives, and instructions; higher headquarters policies; standing operating procedures (SOPs); applicable STANAGs and QSTAGs; memorandums of understanding (MOU) or agreement (MOA); Status of Forces Agreements (SOFAs); and the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs (Appendix A).
- Ensuring field medical records are maintained on each soldier at the primary care MTF in accordance with AR 40-66 and FM 4-02.4.
- Ensuring compliance with the theater blood bank service program.
- Ensuring a viable veterinary program (to include inspection of subsistence and OCONUS food production and bottled water facilities, veterinary PVNTMED, and animal medical care) is established.
- Ensuring a medical laboratory capability or procedures for obtaining this support from out of theater resources are established for the identification and confirmation of the use of suspect BW and CW agent by opposition forces. This also includes the capability for specimens/samples packaging and handling requirements and escort/chain of custody requirements. (Refer to FM 4-02.7 and FM 8-284 for additional information.)
- Planning for and implementing PVNTMED operations (to include PVNTMED programs and initiating PVNTMED measures to counter the medical threat). (Refer to Appendix B of this publication and FM 4-02.17 for additional information on the medical threat.)
- Planning for and ensuring pre- and postdeployment health assessments are accomplished.
- Establishing and executing a medical surveillance program (refer to DOD Directive [DODD] 6490.2, DOD Instructions [DODI] 6490.3, AR 40-66, and FM 4-02.17 for an in-depth discussion).

- Establishing and executing an OEH surveillance program (FM 3-100.4).
- Recommending COSC/MH and substance abuse control programs.
- Coordinating for medical intelligence with the supporting intelligence officer/section/unit. Pursuing other avenues to obtain medical intelligence and/or medical information such as the—
 - Armed Forces Medical Intelligence Center (AFMIC).
 - United States Army Center for Health Promotion and Preventive Medicine.
 - Centers for Disease Control and Prevention (CDC).
 - United States Public Health Services.
 - International organizations (United Nations [UN], the World Health Organization [WHO], or the Pan American Health Organization [PAHO], and other nongovernmental organizations [NGOs]).
 - Information gathered from site visits to HN medical facilities.
- Ensuring that the general threat, medical threat, and medical intelligence considerations are integrated into HSS plans and orders.
- Identifying commander's critical information requirements (CCIR) which include priority information requirements (PIR), essential elements of friendly information (EEFI), and friendly forces information requirements (FFIR) as they pertain to the medical threat; ensuring they are incorporated into the command's intelligence requirements.
- Coordinating for humanitarian assistance, disaster relief, medical response to NBC or terrorist incidents, and refugee and domestic support operations (DSO), when authorized and so directed.
- Advising commanders on HSS NBC defensive actions (such as immunizations, use of chemoprophylaxis, antidotes, pretreatments, and barrier creams).
- Ensuring that investigational new drug (IND) protocols are established and implemented.
- Assessing special equipment and procedures required to accomplish the HSS mission in specific environments such as UO, mountainous terrain, extreme cold weather operations, jungles, and deserts. Requirements are varied, depending upon the scenario, and could include—
 - Obtaining pieces of equipment or clothing not usually carried (piton hammers, extreme cold weather parkas, jungle boots, or the like).
 - Adapting medical equipment sets (MESs) for a specific scenario to include adding items based on the forecasted types of injuries to be encountered (such as more crush injuries and fractures

in UO or mountain operations). In certain scenarios (such as UOs), some medical supplies and equipment may not be carried into the fight initially (such as sick call materials), but rather brought forward by follow-on forces. In mountain operations, bulky or heavy items (such as extra tentage) may not accompany the force because of the difficulty in traversing the terrain.

- Having individual soldiers carry additional medical items, such as bandages and intravenous (IV) fluids.
- Conducting training on: pain management techniques (paragraph 3-2d below); extrication of patients from armored vehicles; extraction from above, below, and at ground level and from under rubble and debris; refresher or initial training for CLSs; and other topics necessitated by the operational mission.
- Recommending disposition instructions for captured enemy medical supplies and equipment. Under the provisions of the Geneva Conventions, medical supplies and equipment are protected from intentional destruction and should be used to initially treat sick, injured, or wounded enemy prisoners of war (EPW). (Refer to Chapter 4 for additional information.)
- Submitting to higher headquarters those recommendations on professional medical problems/conditions that require research and development.
- Coordinating and monitoring patient decontamination operations (FM 4-02.7) to include—
 - Layout and establishment of patient decontamination station.
 - Use of collective protection.
 - Use of nonmedical soldiers to perform patient decontamination procedures under medical supervision.

This paragraph implements STANAGs 2132 and 2350 and QSTAGs 230 and 470.
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d. The command surgeon is responsible for the standard of care which is provided to sick, wounded, and injured soldiers by subordinate medical personnel.

(1) The command surgeon must ensure that standardized protocols for the alleviation of pain (to include the administration of pain relief medications by nonphysician health care providers) are established and disseminated. Further, he must ensure and certify that each trauma specialist (MOS 91W), working under the supervision of a physician, has received sufficient training to—

- Recognize when pain management measures and medications are required.

- Provide pain management measures (elevation, immobilization, and ice [when available]).
- Select the appropriate medication (such as acetaminophen, ibuprofen, or morphine sulfate); determine the mode of administration (oral or parenteral); and be knowledgeable of the possible side effects and how to treat them; and administer the appropriate medication.
- Document the treatment provided (Department of Defense [DD] Form 1380) to include the marking of individuals who have received morphine sulfate.

NOTE

When morphine is administered to a casualty in the field the dose, ZULU time, date, route of entry, and name of the drug must be entered onto the DD Form 1380. Additionally, the trauma specialist (or other health care provider) must mark the casualty with the letter “M” (for morphine) and the hour of injection (such as “M 0830”) on the patient’s forehead with a skin pencil or another semipermanent marking substance. The empty syrette, injection device, or its envelope should be attached to the patient’s clothing.

(2) The command surgeon is also responsible for ensuring that all controlled substances are stored, safeguarded, issued, and accounted for in accordance with the provisions of AR 40-3. The MES for the trauma specialist includes morphine sulfate. When the mission supported involves a high risk of trauma, the command surgeon may authorize the trauma specialist to carry morphine sulfate to alleviate severe pain caused by trauma or wounding. This medication must be accounted for when issued to the trauma specialist and upon mission completion.

3-3. Health Service Support and the Command Surgeon in Joint Operations

a. In joint operations, each Service operates its own health care delivery system. However, health care facilities, medical equipment, supplies, and personnel may be provided on a joint basis, when directed by the joint force commander (JFC). Although joint staffing is not a requisite to joint use, staff augmentation from Service components may be required. When one Service uses personnel or medical elements from another Service, the borrowing Service assumes operational control (OPCON) over those elements. However, administrative responsibility remains with the lending Service.

b. Upon activation of a JTF, a command surgeon is designated from one of the component Services. Joint Publication (Joint Pub) 4-02 states that a joint force surgeon (JFS) should be appointed for each combatant command, subunified command, and JTF. As a specialty advisor, the JFS reports directly to the JFC or the joint land force component commander. The JFS coordinates HSS matters for the JFC. The JFS’s staff should be jointly manned (when possible) and should be of sufficient size to effectively

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facilitate joint coordination of HSS initiatives; rationalization, standardization, and interoperability (RSI); review of plans; and integration with overall operations. The command surgeon must assess component forces HSS requirements and capabilities and provide guidance to enhance effectiveness of HSS through shared use of assets. The JFSs usually have responsibility for—

- Assisting the JFC in formulating a recommended medical evacuation policy for the TO.
- Assisting component commands in identifying what HSS capabilities each component requires and who is responsible for providing these services/support.
- Advising the JFC on the HSS aspects of combat operations, COSC, reconstitution policies, PVNTMED programs and activities, and other factors that could effect operations.
- Advising the JFC on HSS aspects of NBC defensive actions/issues of immunizations, chemoprophylaxis, antidotes, pretreatments, and barrier creams.
- Informing the JFC about the status of HSS units, identifying any shortfalls or deficiencies, and recommending solutions.
- Monitoring the status of patient beds, HSL (including blood and blood products), staffing, designation of a single integrated medical logistics manager (SIMLM), and other issues effecting medical readiness; and recommending solutions to the JFC.
- Informing the JFC about the status of medical assistance and PVNTMED support required and provided to detained and retained persons and EPW.
- Coordinating the delivery of health care to or received from allies, coalition partners, HN, other friendly nations, or contractors on the battlefield.
- Supervising the activities of the Theater Patient Movement Requirements Center (TPMRC) and Joint Blood Program Office (JBPO).
- Preparing the HSS portions of the CSS annexes to joint force plans. (Refer to Appendix F for a planning checklist for joint operations.)
- Preparing patient estimates based on casualty planning factors established by the component commands.
- Coordinating veterinary support within the TO/AO.
- Advising the JFC on HSS aspects of the Geneva Conventions.
- Informing the JFC on the available medical laboratory support required for the identification and confirmation of suspect BW and CW agent use against US forces.

c. Liaison must be established between the JFS and each Service component command surgeon to ensure that mutual understanding of technical medical and dental procedures, unity of purpose and action, and joint HSS is maintained.

CHAPTER 4

FORCE HEALTH PROTECTION IN A GLOBAL ENVIRONMENT
AND THE EFFECTS OF THE LAW OF LAND WARFARE**4-1. The Law of Land Warfare**

a. The conduct of armed hostilities on land is regulated by the Law of Land Warfare. This body of law is inspired by the desire to diminish the evils of war by—

- Protecting both combatants and noncombatants from unnecessary suffering.
- Safeguarding certain fundamental human rights of persons who fall into the hands of the enemy, particularly prisoners of war (POWs), the wounded and sick, and civilians.
- Facilitating the restoration of peace.

b. The Law of Land Warfare places limits on the exercise of a belligerent's power in the interest of furthering that desire (diminishing the evils of war), and it requires that belligerents—

- Refrain from employing any kind or degree of violence which is not actually necessary for military purposes.
- Conduct hostilities with regard for the principles of humanity and chivalry.

c. For additional information on the Law of Land Warfare, refer to DA Pamphlet 27-1 and FM 27-10.

4-2. Sources of the Law of Land Warfare

a. The Law of Land Warfare is derived from two principal sources.

- (1) Lawmaking treaties or conventions (such as the Hague and Geneva Conventions).
- (2) Custom (practices which by common consent and long-established uniform adherence has taken on the force of law).

b. Under the US Constitution, treaties constitute part of the *Supreme Law of the Land*, and thus must be observed by both military and civilian personnel. The unwritten or customary Law of Land Warfare is also part of the US law. It is binding upon the US, citizens of the US, and other persons serving this country.

4-3. The Geneva Conventions

The US is a party to numerous conventions and treaties pertinent to warfare on land. Collectively, these treaties are often referred to as the Hague and Geneva Conventions. Whereas the Hague Conventions

concern the methods and means of warfare, the Geneva Conventions concern the victims of war or armed conflict. The Geneva Conventions are four separate international treaties, signed in 1949. The Conventions are very detailed and contain many provisions, which are tied directly to the HSS mission. These Conventions are entitled—

- a. Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in Field (GWS).*
- b. Geneva Convention for the Amelioration of the Condition of the Wounded, Sick, and Shipwrecked Members of the Armed Forces at Sea (GWS Sea).*
- c. Geneva Convention Relative to the Treatment of Prisoners of War (GPW).*
- d. Geneva Convention Relative to the Protection of Civilian Persons in Time of War (GC).*

4-4. Protection of the Wounded and Sick

The essential and dominant idea of the GWS is that the soldier who has been wounded or who is sick, and for that reason is out of the combat in a disabled condition, is from that moment protected. Friend or foe must be tended with the same care. From this principle, numerous obligations are imposed upon parties to a conflict.

- a. Protection and Care.* Article 12 of the GWS imposes several specific obligations regarding the protection and care of the wounded and sick.

(1) The first paragraph of Article 12, GWS, states “Members of the armed forces and other persons mentioned in the following Article, who are wounded or sick, shall be respected and protected in all circumstances.”

(a) The word *respect* means “to spare, not to attack,” and *protect* means “to come to someone’s defense, to lend help and support.” These words make it unlawful to attack, kill, ill-treat, or in any way harm a fallen and unarmed enemy soldier. At the same time, these words impose an obligation to come to his aid and give him such care as his condition requires.

(b) This obligation is applicable in all circumstances. The wounded and sick are to be respected just as much when they are with their own army or in no man’s land as when they have fallen into the hands of the enemy.

(c) Combatants, as well as noncombatants, are required to respect the wounded. The obligation also applies to civilians; Article 18, GWS, specifically states: “The civilian population shall respect these wounded and sick, and in particular abstain from offering them violence.”

(d) The GWS does not define what “wounded or sick” means, nor has there ever been any definition of the degree of severity of a wound or a sickness entitling the wounded or sick combatant

to respect. Any definition would necessarily be restrictive in character and would thereby open the door to misinterpretation and abuse. The meaning of the words “wounded and sick” is thus a matter of common sense and good faith. It is the act of falling or laying down of arms because of a wound or sickness which constitutes the claim to protection. Only the soldier who is himself seeking to kill may be killed.

(e) The benefits afforded the wounded and sick extend not only to members of the armed forces, but to other categories of persons as well, classes of whom are specified in Article 13, GWS. Even though a wounded person is not in one of the categories enumerated in the Article, we must still respect and protect that person. There is a universal principle which says that any wounded or sick person is entitled to respect and humane treatment and the care which his condition requires. Wounded and sick civilians have the benefit of the safeguards of the GC.

(2) The second paragraph of Article 12, GWS, provides that the wounded and sick “...shall be treated humanely and cared for by the party to the conflict in whose power they may be, without any adverse distinction found on sex, race, nationality, religion, political opinions, or other similar criteria...”

(a) All adverse distinctions are prohibited. Nothing can justify a belligerent in making any adverse distinction between wounded or sick who require his attention, whether they be friend or foe. Both are on equal footing in the matter of their claims to protection, respect, and care. The foregoing is not intended to prohibit concessions, particularly with respect to food, clothing, and shelter, which take into account the different national habits and backgrounds of the wounded and sick.

(b) The wounded and sick shall not be made the subjects of biological, scientific, or medical experiments of any kind which are not justified on medical grounds and dictated by a desire to improve their condition.

(c) The wounded and sick shall not willfully be left without medical assistance, nor shall conditions exposing them to contagion or infection be created.

(3) The *only* reason which can justify priority in the order of treatment are reasons of medical urgency. This is the only justified exception to the principle of equality of treatment of the wounded.

(4) Paragraph 5 of Article 12, GWS, provides that if we must abandon wounded or sick, we have a *moral* obligation to, “as far as military considerations permit,” leave medical supplies and personnel to assist in their care. This provision is in no way bound up with the absolute obligation imposed by paragraph 2 of Article 12 to care for the wounded. A belligerent can never refuse to care for enemy wounded on the pretext that his adversary has abandoned them without medical personnel and equipment.

b. Enemy Wounded and Sick. The protections accorded the wounded and sick apply to friend and foe alike without distinction. Certain provisions of the GWS, however, specifically concern enemy wounded and sick. There are also provisions in the GPW which, because they apply to POWs generally, also apply to enemy wounded or sick.

(1) Article 14 of the GWS states that persons who are wounded and then captured have the status of POWs. However, that wounded soldier is also a person who needs treatment. Therefore, a

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wounded soldier who falls into the hands of an enemy who is a Party to the GWS and the GPW, such as the US, will enjoy protection under both Conventions until his recovery. The GWS will take precedence over the GPW where the two overlap.

(2) Article 16 of the GWS requires the recording and forwarding of information regarding enemy wounded, sick, or dead. (See AR 190-8 for disposition of an EPW after hospital care.)

(3) When intelligence indicates that large numbers of EPWs may result from an operation, medical units may require reinforcement to support the anticipated additional EPW patient workload. Procedures for estimating the medical workload involved in the treatment and care of EPW patients are described in FM 8-55.

c. Search for and Collection of Casualties. Article 15 of the GWS imposes a duty on combatants to search for and collect the dead and wounded and sick as soon as circumstances permit. It is left to the tactical commander to judge what is possible and to decide to commit his medical personnel to this effort. If circumstances permit, an armistice or suspension of fire should be arranged to permit this effort.

d. Assistance of the Civilian Population. Article 18, GWS, addresses the civilian population. It allows a belligerent to ask the civilians to collect and care for wounded or sick of whatever nationality. This provision does not relieve the military authorities of their responsibility to give both physical and moral care to the wounded and sick. The GWS also reminds the civilian population that they must respect the wounded and sick, and in particular, must not injure them.

e. Enemy Civilian Wounded and Sick. Certain provisions of the GC are relevant to the HSS mission.

(1) Article 16 of the GC provides that enemy civilians who are “wounded and sick, as well as the infirm, and expectant mothers shall be the object of particular protection and respect.” The Article also requires that, “as far as military considerations allow, each Party to the conflict shall *facilitate* the steps taken to search for the killed and wounded (civilians), to assist...other persons exposed to grave danger, and to protect them against pillage and ill-treatment [emphasis added].”

(a) The “protection and respect” to which wounded and sick enemy civilians are entitled is the same as that accorded to wounded and sick enemy military personnel.

(b) While Article 15 of the GWS requires Parties to a conflict to search for and collect the dead and wounded and sick members of the armed forces, Article 16 of the GC states that the Parties must “facilitate the steps taken” in regard to civilians. This recognizes the fact that saving civilians is the responsibility of the civilian authorities rather than of the military. The military is not required to provide injured civilians with medical care in a CZ. However, if we start providing treatment, we are bound by the provisions of the GWS. Provisions for treating civilians (enemy or friendly) will be addressed in EAC regulations.

(2) In occupied territories, the Occupying Power must accord the inhabitants numerous protections as required by the GC. The provisions relevant to medical care include the—

- Requirement to bring in medical supplies for the population if the resources of the occupied territory are inadequate.
- Prohibition on requisitioning medical supplies unless the requirements of the civilian population have been taken into account.
- Duty of ensuring and maintaining, with the cooperation of national and local authorities, the medical and hospital establishments and services, public health, and hygiene in the occupied territory.
- Requirement that medical personnel of all categories be allowed to carry out their duties.
- Prohibition on requisitioning civilian hospitals on other than a temporary basis and then only in cases of urgent necessity for the care of military wounded and sick and after suitable arrangements have been made for the civilian patients.
- Requirement to provide adequate medical treatment to detained persons.
- Requirement to provide adequate medical care in internment camps.

4-5. Protection and Identification of Medical Personnel

Article 24 of the GWS provides special protection for “Medical personnel *exclusively engaged* in the search for, or the collection, transport, or treatment of the wounded or sick, or in the prevention of disease, [and] staff *exclusively engaged* in the administration of medical units and establishments . . . [emphasis added].” Article 25 provides limited protection for “Members of the armed forces specially trained for employment, should the need arise, as hospital orderlies, nurses, or auxiliary stretcher-bearers, in the search for or the collection, transport, or treatment of the wounded and sick . . . *if they are carrying out those duties at the time when they come into contact with the enemy or fall into his hands* [emphasis added].”

a. Protection. There are two separate and distinct forms of protection.

(1) The first is protection from intentional attack if medical personnel are identifiable as such by an enemy in a combat environment. Normally this is facilitated by medical personnel wearing an armband bearing the distinctive emblem (a red cross or red crescent on a white background), or by their employment in a medical unit, establishment, or vehicle (including medical aircraft and hospital ships) that displays the distinctive emblem. Persons protected by Article 25 may wear an armband bearing a miniature distinctive emblem only while executing medical duties.

(2) The second protection provided by the GWS pertains to medical personnel who fall into the hands of the enemy. Article 24 personnel are entitled to “retained person” status. They are not deemed to be POWs, but otherwise benefit from the protections of the GPW. They are authorized to carry out medical duties only, and “shall be retained only in so far as the state of health . . . and the number of POWs require.”

Article 25 personnel are POWs, but shall be employed to perform medical duties in so far as the need arises. They may be required to perform other duties or labor, and they may be held until a general repatriation of POWs is accomplished upon the cessation of hostilities.

b. Specific Cases. Army Medical Department personnel and non-AMEDD personnel assigned to medical units fall into the category identified in Article 24 provided they meet the “exclusively engaged” criteria of that article. The US Army does not have any personnel who officially fall into the category identified in Article 25. While it is not a violation of the GWS for Article 24 personnel to perform nonmedical duties, it should be understood, however, that Article 24 personnel lose their protected status under that article if they perform duties or tasks inconsistent with their noncombatant role. Should those personnel later take up their medical duties again, a reasonable argument might be made that they cannot regain Article 24 status since they have not been exclusively engaged in medical duties and that such switching of roles might at best cause such personnel to fall under the category identified in Article 25.

(1) While only Article 25 refers to nurses, nurses are Article 24 personnel if they meet the “exclusively engaged” criteria of that article.

(2) The AMEDD officers and noncommissioned officers (NCOs) assigned to nonmedical positions in a forward support battalion (FSB), main support battalion (MSB), division support battalion (DSB), or a division support command (DISCOM) are neither Article 24 nor Article 25 personnel. Such assignments place them in the role of a combatant. Examples of such personnel are—

(a) The AMEDD officers serving as commanders of FSBs, MSBs, or DSBs with responsibility for base or base cluster defense as well as C2 of medical and nonmedical units.

(b) The AMEDD officers and NCOs assigned to nonmedical staff positions with an FSB, MSBs, or DSB with responsibility for planning and supervising the logistics support for a combat maneuver brigade or other combat unit.

(3) Article 24 personnel who might become Article 25 personnel by virtue of their switching roles could include the following:

(a) A medical company commander, a physician, or the executive officer (an MS officer) detailed as convoy march unit commander with responsibility for medical and nonmedical unit routes of march, convoy control, defense, and repulsing attacks.

(b) Helicopter pilots who are permanently assigned to a dedicated medical aviation unit to fly medical evacuation helicopters, but fly helicopters not bearing the red cross emblem on standard combat missions during other times.

(4) The GWS does not itself prohibit the use of Article 24 personnel in perimeter defense of nonmedical units such as unit trains logistics areas or base clusters under overall security defense plans, but the policy of the US Army is that Article 24 personnel will not be used for this purpose. Adherence to this policy should avoid any issues regarding their status under the GWS due to a temporary change in their role from noncombatant to combatant. Medical personnel may guard their own unit without any concurrent loss of their protected status.

c. Identification Cards and Armbands. Medical personnel who meet the “exclusively engaged” criteria of Article 24, GWS, are entitled to wear an armband bearing the distinctive emblem of the red cross and carry the medical personnel identification card authorized in Article 40, GWS (in the US armed services, DD Form 1934). Article 25 personnel and medical personnel serving in positions that do *not* meet the “exclusively engaged” criteria of Article 24 are *not* entitled to carry the medical personnel identification (ID) card or wear the distinctive emblem armband. Such personnel carry a standard military ID card (DD Form 2A) and, under Article 25, may wear an armband bearing a miniature distinctive emblem when executing medical duties.

This paragraph implements STANAGs 2060, 2454, 2931, and QSTAG 248.

4-6. Protection and Identification of Medical Units, Establishments, Buildings, Materiel, and Medical Transports

a. Protection. There are two separate and distinct forms of protection.

(1) The first is protection from intentional attack if medical units, establishments, or transports are identifiable as such by an enemy in a combat environment. Normally, this is facilitated by medical units or establishments flying a white flag with a red cross and by marking buildings and transport vehicles with the distinctive emblem.

(a) It follows that if we cannot attack recognizable medical units, establishments, or transports, we should allow them to continue to give treatment to the wounded in their care as long as this is necessary.

(b) All vehicles employed exclusively on medical transport duty are protected on the battlefield. Medical vehicles being used for both military and medical purposes, such as moving wounded personnel during an evacuation and carrying retreating belligerents, are not entitled to protection.

(c) Medical aircraft, like medical transports, are protected from intentional attack, but with a major difference—they are protected only “while flying at heights, times, and on routes specifically agreed upon between the belligerents concerned,” (Article 36, GWS). Such agreements may be made for each specific case or may be of a general nature, concluded for the duration of hostilities. If there is no agreement, belligerents use medical aircraft at their own risk and peril.

(d) Article 37, GWS specifies that “medical aircraft of Parties to the conflict may fly over the territory of neutral Powers, land on it in case of necessity, or use it as a port of call.” The medical aircraft will “give the neutral Powers previous notice of their passage over the said territory and obey all summons to alight, on land or water.” The aircraft will be “immune from attack only when flying on routes, at heights and at times specifically agreed upon between the Parties to the conflict and the neutral Power concerned.” It further states that “the neutral Powers may, however, place conditions or restrictions on the passage or landing of medical aircraft on their territory.”

(e) The second paragraph of Article 19 imposes an obligation upon belligerents to “ensure that the said medical establishments and units are, as far as possible, situated in such a manner that attacks against military objectives cannot imperil their safety.” Hospitals *should* be sited alone, as far as possible from military objectives. The unintentional bombardment of a medical establishment or unit due to its presence among or in proximity to valid military objectives is not a violation of the GWS. Legal protection is certainly valuable, but it is more valuable when accompanied by practical safeguards.

(2) The second protection provided by the GWS pertains to medical units, establishments, materiel, and transports that fall into the hands of the enemy.

(a) Captured mobile medical unit materiel is to be used first to treat the patients in the captured unit. If there are no patients in the captured unit, or when those who were there have been moved, the materiel is to be used for the treatment of other wounded and sick persons.

(b) Generally, the buildings, materiel, and stores of fixed medical establishments will continue to be used to treat wounded and sick. However, after provision is made to care for remaining patients, tactical commanders may make other use of them. All distinctive markings must be removed if the buildings are to be used for other than medical purposes.

(c) The materiel and stores of fixed establishments and mobile medical units are not to be intentionally destroyed, even to prevent them from falling into enemy hands. In certain extreme cases, buildings may have to be destroyed for tactical reasons.

(d) Medical transports that fall into enemy hands may be used for any purpose once arrangement has been made for the medical care of the wounded and sick they contain. The distinctive markings must be removed if they are to be used for nonmedical purposes.

(e) A medical aircraft is supposed to obey a summons to land for inspection. If it is performing its medical mission, it is supposed to be released to continue its flight. If examination reveals that an act “harmful to the enemy” (for example, if the aircraft is carrying munitions) has been committed, it loses the protections of the Conventions and may be seized. If a medical aircraft makes an involuntary landing, all aboard, except the medical personnel, will be POWs. A medical aircraft refusing a summons to land is a fair target.

b. Identification. The GWS contains several provisions regarding the use of the red cross emblem on medical units, establishments, and transports (the identification of medical personnel has been previously discussed).

(1) Article 39 of the GWS reads as follows: “Under the direction of the competent military authority, the emblem shall be displayed on the flags, armlets, and on all equipment employed in the Medical Service.”

(a) There is no obligation of a belligerent to mark his units with the emblem. Sometimes a commander (generally no lower than a brigade commander for US forces) may order the camouflage of his medical units in order to conceal the presence or real strength of his forces. The enemy must respect a

medical unit if he knows of its presence, even one that is camouflaged or not marked. The absence of a visible red cross emblem, however, coupled with a lack of knowledge on the part of the enemy as to the unit's protected status, may render that unit's protection valueless. (Refer to paragraph 4-8b(3) below for additional information.)

(b) The distinctive emblem is not a red cross alone; it is a red cross on a white background. Should there be some good reason, however, why an object protected by the Convention can only be marked with a red cross without a white background, belligerents may not make the fact that it is so marked a pretext for refusing to respect it.

(c) Some countries use the red crescent on a white background in place of the red cross. This emblem is recognized as an authorized exception under Article 38, GWS. Although not specifically authorized as a symbol in lieu of the red cross, enemies of Israel in past wars have recognized the red Star of David and have afforded it the same respect as the red cross. This showed compliance with the general rule that the wounded and sick must be respected and protected when they are recognized as such, even when not properly marked.

NOTE

The Geneva Conventions authorizes the use of the following distinctive emblems on a white background: Red Cross; Red Crescent; and Red Lion and Sun. In operations conducted in countries using an emblem other than the Red Cross on a white background, US soldiers must be made aware of the different official emblems. United States forces are legally entitled to only display the Red Cross. However, commanders have authorized the display of both the Red Cross and the Red Crescent to accommodate HN concerns and to ensure that confusion of emblems would not occur. Such use of the Red Crescent must be in a smaller size than the Red Cross.

(d) The initial phrase of Article 39 shows that it is the military commander who controls the emblem and can give or withhold permission to use it. He is at all times responsible for the use made of the emblem and must see that it is not improperly used by the troops or by individuals.

(2) Article 42 of the GWS specifically addresses the marking of medical units and establishments.

(a) "The distinctive flag of the Convention shall be hoisted only over such medical units and establishments as are entitled to be respected under the Convention, and only with the consent of the military authorities." (Paragraph 1, Article 42, GWS) Although the Convention does not define "the distinctive flag of the Convention," what is meant is a white flag with a red cross in its center. Also, the word "flag" must be taken in its broadest sense. Hospitals are often marked by one or several red cross emblems painted on the roof. Finally, the military authority must consent to the use of the flag (see the above comments on Article 39) and must ensure that the flag is used only on buildings entitled to protection.

(b) “In mobile units, as in fixed establishments, [the distinctive flag] may be accompanied by the national flag of the Party to the conflict to which the unit or establishment belongs.” (Paragraph 2, Article 42, GWS) This provision makes it optional to fly the national flag with the red cross flag. It should be noted that on a battlefield, the national flag is a symbol of belligerency and is therefore likely to provoke attack.

(3) In a NATO conflict, NATO STANAG 2931 provides for camouflage of the Geneva emblem on medical facilities where the lack of camouflage might compromise tactical operations. Medical facilities on land, supporting forces of other nations, will display or camouflage the Geneva emblem in accordance with national regulations and procedures. When failure to camouflage would endanger or compromise tactical operations, the camouflage of medical facilities may be ordered by a NATO commander of at least brigade level or equivalent. Such an order is to be temporary and local in nature and countermanded as soon as the circumstances permit. It is not envisaged that fixed, large, medical facilities would be camouflaged. The STANAG defines “medical facilities” as “medical units, medical vehicles, and medical aircraft on the ground.”

NOTE

There is no such thing as a “camouflaged” *red cross*. When camouflaging a medical unit or ambulance, either cover up the red cross or take it down. A *black cross* on an olive drab or any other background is not a symbol recognized under the Geneva Conventions.

4-7. Loss of Protection of Medical Establishments and Units

Medical assets lose their protected status by committing acts “harmful to the enemy.” (Article 21, GWS.) A warning must be given to the offending unit and a reasonable amount of time allowed to cease such activity.

a. *Acts Harmful to the Enemy.* The phrase “acts harmful to the enemy” is not defined in the Convention, but should be considered to include acts the purpose or effect of which is to harm the enemy, by facilitating or impeding military operations. Such harmful acts would include, for example, the use of a hospital as a shelter for able-bodied combatants, as an arms or ammunition dump, or as a military observation post. Another instance would be the deliberate siting of a medical unit in a position where it would impede an enemy attack.

b. *Warning and Time Limit.* The enemy has to warn the unit to put an end to the harmful acts and must fix a time limit on the conclusion of which he may open fire or attack if the warning has not been complied with. The phrase “in all appropriate cases” recognizes that there might obviously be cases where no time limit could be allowed. A body of troops approaching a hospital and met by heavy fire from every window would return fire without delay.

c. *Use of Smoke and Obscurants.* The use of smoke and obscurants during medical evacuation operations for signaling or marking landing zones (LZs) does not constitute an act harmful to the enemy.

However, employing such devices to obfuscate a medical element's position or location is tantamount to camouflaging; it would jeopardize its entitlement privilege status under the GWS. Refer to FM 8-10-6 for additional information on the use of smoke and obscurants for HSS operations.

4-8. Conditions not Depriving Medical Units and Establishments of Protection

a. Article 22 of the GWS reads as follows: "The following conditions shall not be considered as depriving a medical unit or establishment of the protection guaranteed by Article 19, that the—

(1) Personnel of the unit or establishment are armed, and that they use the arms in their own defense, or in that of the wounded and sick in their charge.

(2) Absence of armed orderlies, the unit or establishment is protected by a picket or by sentries or by an escort.

(3) Small arms and ammunition taken from the wounded and sick and not yet handed to the proper service, are found in the unit or establishment.

(4) Personnel and materiel of the veterinary service are found in the unit or establishment, without forming an integral part thereof.

(5) Humanitarian activities of medical units and establishments or of their personnel extend to the care of civilian wounded or sick."

b. These five conditions are not to be regarded as acts harmful to the enemy. These are particular cases where a medical unit retains its character and its right to immunity, in spite of certain appearances which might lead to a contrary conclusion or, at least, created some doubt.

(1) *Defense of medical units and self-defense by medical personnel.* A medical unit is granted a privileged status under the Law of Land Warfare. This status is based on the view that medical personnel are not combatants and that their role in the combat area is exclusively a humanitarian one. In recognition of the necessity of self-defense, however, medical personnel may be armed for their own defense or for the protection of the wounded and sick under their charge. To retain this privileged status, they must refrain from all aggressive action and may only employ their weapons if attacked in violation of the Conventions. They may not employ arms against enemy forces acting in conformity with the Law of Land Warfare and may not use force to prevent the capture of their unit by the enemy (it is, on the other hand, perfectly legitimate for a medical unit to withdraw in the face of the enemy). Medical personnel who use their arms in circumstances not justified by the Law of Land Warfare expose themselves to penalties for violation of the Law of Land Warfare and, provided they have been given due warning to cease such acts, may also forfeit the protection of the medical unit or establishment which they are protecting.

(*a*) Medical personnel may carry only small arms, such as rifles or pistols or authorized substitutes. Army Regulation 350-41 (paragraph 10-2f[1]) supports this policy. It states "Army Medical Department personnel and non-AMEDD personnel in medical units will train and qualify with individual

small arms (pistols and rifles). These personnel are not required to train and qualify on crew-served weapons. However, AMEDD personnel attending training at noncommissioned officer education system courses will receive weapons instruction that is part of the curriculum. This will ensure that successful completion of the course is not jeopardized by failure to attend the weapons training portion of the curriculum (AR 351-1)."

(b) The presence of machine guns, grenade launchers, booby traps, hand grenades, light antitank weapons, or mines (regardless of the method by which they are detonated) in or around a medical unit or establishment would seriously jeopardize its entitlement privilege status under the GWS. The *deliberate arming* of a medical unit with such items could constitute an act harmful to the enemy and cause the medical unit to lose its protection, regardless of the location of the medical unit.

(2) *Guarding medical units.* As a rule, a medical unit is to be guarded by its own personnel. However, it will not lose its protected status if the guard is performed by a number of armed soldiers. The military guard attached to a medical unit may use its weapons, just as armed medical personnel may, to ensure the protection of the unit. But, as in the case of medical personnel, the soldiers may only act in a purely defensive manner and may not oppose the occupation or control of the unit by an enemy who is respecting the unit's privileged status. The status of such soldiers is that of ordinary members of the armed forces. The mere fact of their presence with a medical unit will shelter them from attack. In case of capture, they will be POWs.

(3) *Arms and ammunition taken from the wounded.* Wounded persons arriving in a medical unit may still be in possession of small arms and ammunition, which will be taken from them and handed to authorities outside the medical unit. Should a unit be captured by the enemy before it is able to get rid of these arms, their presence is not of itself cause for denying the protection to be accorded the medical unit under the GWS.

(4) *Personnel and materiel of the Veterinary Corps.* The presence of personnel and materiel of the Veterinary Corps with a medical unit is authorized, even where they do not form an integral part of such unit.

(5) *Care of civilian wounded or sick.* A medical unit or establishment protected by the GWS may take in civilians as well as military wounded and sick without jeopardizing its privileged status. This clause merely sanctions what is actually done in practice.

4-9. The 1977 Protocols to the Geneva Conventions

Amendments to the Geneva Conventions have been ratified by some of our allies and potential adversaries. The US representative to the diplomatic conference signed these amendments, but they have not been officially ratified by our government.

4-10. Compliance with the Geneva Conventions

a. The US is a party to the 1949 Geneva Conventions. Two of these Conventions afford protection for medical personnel, facilities, and evacuation platforms (to include aircraft on the ground).

All HSS personnel should thoroughly understand the provisions of the Geneva Conventions that apply to medical activities. Violation of these Conventions can result in the loss of the protection afforded by them. Medical personnel should inform the tactical commander of the consequences of violating the provisions of these Conventions. The consequences can include the following:

- Medical evacuation assets subjected to attack and destruction by the enemy.
- Health service support capability degraded.
- Captured medical personnel becoming POWs rather than retained persons. They may not be permitted to treat fellow prisoners.
- Loss of protected status for medical unit, personnel, or evacuation platforms (to include aircraft on the ground).

b. Because even the perception of impropriety can be detrimental to the mission and US interests, HSS commanders must ensure that they do not give the impression of impropriety in the conduct of medical operations. For example, if a medical evacuation battalion commander included in the tactical standing operating procedure (TSOP) rules governing the use of automatic or crew-served weapons, it would give the impression that the unit possessed and intended to use these types of weapons. Under the provisions of the Geneva Conventions, medical units are only authorized individual small arms for use in the defense of the patients under their care and for themselves. Even though the unit did not possess these types of weapons, the entry in the TSOP could be misinterpreted and a case made that the commander intended to use these weapons in violation of the Geneva Conventions.

4-11. Medical Care for Retained and Detained Personnel

a. Definitions.

(1) The term *detainee* refers to any person captured or otherwise detained by an armed force (Joint Pub 1-02).

(2) The term *retained personnel* is defined as “Enemy personnel who come within any of the categories below are eligible to be certified as retained personnel. a. Medical personnel exclusively engaged in the (1) Search for, collection, transport, or treatment of the sick and wounded; (2) Prevention of disease; and/or (3) Staff administration of medical units and establishments exclusively. b. Chaplains attached to enemy armed forces. c. Staff of national Red Cross societies and other voluntary aid societies duly recognized by their governments. The staffs of such societies must be subject to military laws and regulations (Joint Pub 1-02).”

b. Provision of Medical Care. As the United States is a participatory nation to the Geneva Conventions, personnel detained and/or retained personnel are protected under the provisions of the Conventions. Personnel in US custody will receive medical care consistent with the standard of medical care which applies for US military personnel.

c. Additional Information. For additional information refer to DODD 2310.1, DODD 5100.77, AR 190-8, FM 3-19.40, FM 4-02- and 8-10-series, and FM 27-10.

CHAPTER 5

ARMY MEDICAL DEPARTMENT FUNCTIONAL AREAS

5-1. Functional Areas

a. Force health protection in a global environment, executed by the HSS system, is comprised of ten functional areas. To maximize the effectiveness and efficiency of the HSS system, all functional areas must be considered in the planning process. The execution of the HSS mission and the implementation of programs within the functional areas is essential in providing health care delivery on the battlefield. To ensure the success of the HSS mission, thorough and comprehensive plans are required and, once developed, should be exercised through rehearsals.

b. This chapter discusses each of the functional areas and provides references to functional-area specific manuals which provide the doctrine and the tactics, techniques, and procedures (TTPs) necessary to execute the HSS mission.

5-2. Command, Control, Communications, Computers, and Intelligence

a. The medical C4I system provides a seamless state-of-the-art system across the operational continuum. The medical C4I capability is flexible and versatile, and is capable of providing reliable HSS to warfighters in current and future operations. It is strategically, operationally, and tactically responsive to a broad range of worldwide requirements. The medical C4I capability integrates both vertically and horizontally with the warfighters' C4I battlefield operating system (BOS), and SU. It also has reliable communications network interconnectivity with the global automated systems architectures to access clinical and medical information to support force projection operations. The medical C4I system employs automation and communications equipment to—

- Assist in conserving the fighting strength by integrating medical and OEH surveillance data and other medical threat indicators. This assists in identifying disease and injury trends which facilitates the prevention of performance deterioration and casualties due to DNBI.
- Provide seamless state-of-the-art medical information management across the operational continuum.
- Ensure the capability of rapid strategic deployability in exercising the C4I first-in, last-out principle.
- Enhance the capability to promptly clear the battlefield (locate, acquire, treat, and evacuate battlefield casualties).
 - Conduct split-base operations on a continuous basis.
 - Provide HSS staff virtual presence at all command levels.
 - Provide a lead element with deploying forces and coordinate the arrival of HSS assets into an AO.

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- Support joint, allied, coalition, and HN medical forces, as directed, across the full spectrum of operations.
 - Interface with Army systems, other Services, and DOD-automated systems throughout the operational continuum.
 - Allow transfer of images and videos from numerous sensors and platforms, with image compression and transmission technologies, enabling better HSS SU in the TO.
 - Enable three-dimensional presentation of imagery and graphics with multimedia technology to help commanders visualize their TO for more effective training, planning, rehearsal, and execution.
 - Enable the conduct of telemedicine operations (telementoring and teleconsultation activities).
- b.* For a more detailed discussion on the AMEDD C4I communications system and information management, refer to FM 8-10-16.

5-3. Medical Treatment

- a.* The medical treatment functional area encompasses Levels I and II medical treatment. These levels of care are provided by organic assets or on an area support basis from supporting medical units/elements. Within corps, this support is provided by divisional medical companies, medical companies/troops of separate brigades or armored cavalry regiments, and the ASMC. In EAC, it is also provided by the ASMC. The ASMC is assigned/attached to the medical battalion, area support (ASMB) which is a C2 headquarters for assigned and/or attached ASMCs, the medical detachment, area support (ASMD), and/or other medical units/elements as assigned (such as COSC, PVNTMED, or veterinary detachments and/or dental companies).
- b.* In operation, each medical company is assigned an AO to ensure all personnel receive adequate medical care. Within each company sector, the treatment platoon with its treatment, dental, x-ray, laboratory, and patient-holding capability forms the core of the company's support scheme. The treatment squads are employed geographically to best support the troop population. Company ambulances are collocated with HSS elements to provide a ground medical evacuation capability or to evacuate patients to the Level II MTF established by the area support section of the medical company for further treatment or holding.
- c.* For additional information on area medical support refer to FM 4-02.4, FM 4-02.6 and FM 4-02.24.

5-4. Medical Evacuation and Medical Regulating

- a.* *Theater Evacuation Policy.* The theater evacuation policy is established by the SECDEF, with the advice of the Joint Chiefs of Staff (JCS) and upon the recommendation of the theater commander. The

policy establishes, in number of days, the maximum period of noneffectiveness (hospitalization and convalescence) that patients may be held within the theater for treatment. This policy does not mean that a patient is held in the TO for the entire period of noneffectiveness. A patient who is not expected to be ready for RTD within the number of days established in the theater evacuation policy is treated, stabilized, and then evacuated out of theater. This is done providing that the treating physician determines that such evacuation will not aggravate the patient's disabilities or medical condition. For example, a theater evacuation policy of 15 days does not mean that a patient is held in the theater for 14 days and then evacuated. Instead, it means that a patient is evacuated as soon as possible after the determination is made that he cannot be returned to duty within 15 days following admission to a Level III or above hospital.

★

This paragraph implements STANAGs 2087 and 3204.

★ *b. Evacuation Priorities.* The initial decision of what level of treatment is required (Level I, Level II, and so forth) is made by the treatment element. Soldiers are evacuated by the most expeditious means of evacuation dependent on their medical condition, assigned evacuation precedence, and availability of medical evacuation platforms. Patients may be evacuated from the point of injury or wounding to a medical treatment facility in closest proximity to the point of injury/wounding to ensure they are stabilized to withstand the rigors of evacuation over greater distances. The evacuation precedences are—

★ • *Priority I, URGENT* is assigned to emergency cases that should be evacuated as soon as possible and within a maximum of 1 hour to save life, limb, or eyesight and to prevent complications of serious illness and to avoid permanent disability.

• *Priority IA, URGENT-SURG* is assigned to patients who must receive far forward surgical intervention to save life and stabilize for further evacuation.

• *Priority II, PRIORITY* is assigned to sick and wounded personnel requiring prompt medical care. This precedence is used when the individual should be evacuated within 4 hours or his medical condition could deteriorate to such a degree that he will become an URGENT precedence, or whose requirements for special treatment are not available locally, or who will suffer unnecessary pain or disability.

• *Priority III, ROUTINE* is assigned to sick and wounded personnel requiring evacuation but whose condition is not expected to deteriorate significantly. The sick and wounded in this category should be evacuated within 24 hours.

• *Priority IV, CONVENIENCE* is assigned to patients for whom evacuation by medical vehicle is a matter of medical convenience rather than necessity.

NOTE

The NATO STANAG 3204 has deleted the category of Priority IV, CONVENIENCE; however, it will still be included in the US Army evacuation priorities as there is a requirement for it on the battlefield.

C1, FM 4-02

c. *Responsibilities for Medical Evacuation.* At the tactical level, the Service Component Commanders are responsible for executing the medical evacuation of their forces. Strategic aeromedical evacuation is the responsibility of the United States Transportation Command (USTRANSCOM).

d. *Ship-to-Shore Medical Evacuation Mission.* United States Army aeromedical evacuation resources may provide, on an area support basis, medical evacuation from shore-to-ship for deployed USN and USMC forces.

e. *Medical Regulating.* Medical regulating is a patient management system designed to coordinate the movement of patients from Level III and above hospitals through successive levels of medical care to an MTF that can provide the appropriate medical care and treatment. A formal medical regulating system is not available at Levels I and II. Prompt movement of patients to the required level of professional care is necessary to avoid increased morbidity and mortality. The TPMRC is responsible for medical regulating within and from Levels III and IV hospitals to the CONUS-support base (Level V). The Global Patient Movement Requirements Center (GPMRC) is responsible for medical regulating within the CONUS-support base.

f. *Additional Information.* The primary references for medical evacuation are FMs 8-10-6 and 8-10-26. Additional information is contained in FM 4-02.4 and FM 4-02.6.

5-5. Hospitalization

a. Hospitalization is a part of the theater-wide HSS system for managing sick, injured, and wounded personnel. The term *hospitalization* is used to embrace that portion of health care delivery provided at hospitals on an *inpatient* basis for all classes of patients whose conditions cannot be managed on an *outpatient* or *holding* status.

(1) An *inpatient* is a person admitted to and treated within a hospital and who cannot be returned to duty within the same calendar day.

(2) An *outpatient* is a person receiving medical/dental examination and/or treatment from medical personnel and in a status other than being admitted to a hospital. Included in this category are the personnel who are treated and retained (held) in an MTF other than a hospital (such as a Level II MTF).

(3) A *holding patient* is a person who is treated at Level II and is expected to be able to RTD within 72 hours or is being held for further evacuation to the rear.

b. Under the Medical Force 2000 force structure, the theater hospitalization system included four types of hospitals. In the corps, the combat support hospital (CSH) was the principle hospital to receive all classes of patients. The mobile Army surgical hospital (MASH) could be deployed forward into the division rear to provide far forward surgical intervention to stabilize nontransportable patients for further evacuation. (The MASH was replaced by the FST.) In the communications zone (COMMZ), the field hospital (FH) and general hospital (GH) provided definitive treatment to all classes of patients. Those patients anticipated to RTD within the stated theater evacuation policy were transferred to a FH, while patients requiring evacuation

from theater were transferred to the GH. For a discussion of the CSH, refer to FM 8-10-14. For a discussion of the FH and GH, refer to FM 8-10-15. For a discussion of the FST, refer to FM 8-10-25.

c. Under the MRI (Appendix G), the theater hospitalization system consists of one hospital—the redesigned CSH. It has been redesigned to enable it to be used in force projection operations. Its modular design allows it to be employed in different increments of operating beds. Refer to FM 4-02.10 for additional information.

5-6. Preventive Medicine Services

a. Preventive medicine services are essential in maintaining and sustaining the health of the force in garrison and throughout the mobilization, predeployment, redeployment, and demobilization continuum. The scope of PVNTMED services include—

- Providing assistance in the control of arthropod- and rodentborne diseases, including technical consultation, entomological surveys/investigations, and reinforcement of the unit's organic pest management capabilities.
- Providing assistance in the control of waterborne diseases by monitoring the water quality.
- Providing assistance in the control of foodborne diseases by monitoring food service operations and providing guidance to commanders. (The actual function of inspecting food for safety and quality assurance is a veterinary function. Refer to paragraph 5-8 of this manual and FM 8-10-18 for additional information on veterinary functions and support.)
- Providing policy guidance and monitoring compliance for immunization, chemoprophylaxis, antidotes, and pretreatment activities and barrier cream use.
- Providing assistance and subject matter expertise in the control of excessive OEH exposures to such hazards as noise, TIMs, and climatic extremes.
- Providing assistance to command surgeons in evaluating the—
 - Elements of the medical threat.
 - Risk to the force associated with identified elements of the medical threat.
 - Integration of the medical threat into planning for and executing HSS operations.
- Establishing a medical and OEH surveillance system which encompasses predeployment medical screening (developing a medical baseline), deployment and surveillance while in the operational area, medical screening prior to redeployment, and follow-up medical assessments upon return to home station.

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- Educating troops in DNBI prevention measures including those measures used to reduce risks from NBC agents/weapons.
 - Training unit field sanitation teams.
 - Providing technical consultation on selecting and developing bivouac sites, cantonment areas, refugee camps, and EPW compounds.
 - Conducting a field water vulnerability assessment.
 - Providing professional and technical advice to commanders at all levels on measures to reduce noneffectiveness from DNBI.
 - Reporting deployment health surveillance and readiness statistics and environmental health data, as required.
 - Surveying operational environments to detect and identify health hazards and to formulate means for minimizing their effects.
 - Investigating disease outbreaks and recommending control measures.
 - Providing assistance in reducing noise hazard in rest and recuperation areas to nonstressful levels.
- b.* A discussion of the medical threat is provided in paragraph 2-3. Medical intelligence preparation of the battlefield is discussed in-depth in Appendix B and FM 8-10-8.
- c.* For additional information on PVNTMED support, refer to AR 40-5, FM 4-02.17, FM 4-02.33, FM 4-25.12, FM 8-42, FM 8-55, and FM 21-10. Policy and guidance on medical surveillance activities is contained in Joint Staff Memorandum MCM 0006-02, DODD 6490.2, DODI 6490.3, and AR 40-66.

5-7. Dental Services

- a.* The dental mission in a TO is to conserve the oral health of the soldier by—
- Preventing oral disease.
 - Promoting dental health.
 - Providing dental treatment to eliminate or reduce the effects of dental disease and injury.
 - Providing early treatment of severe oral and maxillofacial injuries for casualties that must be evacuated.

b. There are two categories of dental care—operational care and comprehensive care.

(1) *Operational care* is provided in the TO and consists of two types of dental care.

(a) *Emergency dental care* is given for the relief of oral pain, elimination of acute infection, control of life-threatening oral conditions (hemorrhage, cellulitis, or respiratory difficulty) and treatment of trauma to teeth, jaws, and associated facial structures. It is the most austere type of care and is available to soldiers engaged in tactical operations. Common examples of emergency treatments are simple extractions, administration of antibiotics and pain medicines, and temporary fillings. At Level I there are no dentists assigned, however, the physician or PA can provide limited emergency dental treatment (relief of pain and administration of antibiotics until the patient can be seen by the dentist assigned to FSMC or other Level II facility).

(b) *Essential dental care* includes dental treatment necessary to intercept potential emergencies. This type of operational care is necessary for the prevention of lost duty time and preservation of the fighting strength. It is also intended to maintain the overall oral fitness of soldiers at a level consistent with combat readiness. Most dental disease is chronic and recurring. A soldier's oral health status will deteriorate from the day of deployment if essential dental care is not provided. The scope of services includes minor oral surgery, definitive restorative, exodontic, periodontal, and prosthodontic procedures as well as prophylaxis. This is the highest type of dental care provided within the TO.

(2) *Comprehensive dental care* is dental treatment to restore an individual to optimal oral health, function, and esthetics and is normally provided in the CONUS-support base. If this capability is deployed to the theater, it requires at least a Level III type facility.

c. Refer to FM 4-02.19 for additional information on dental services.

5-8. Veterinary Services

a. Veterinary service is an integral part of HSS within a TO. The US Army Veterinary Service is designated as the DOD Executive Agent for veterinary services and as such, provides support as required for the US Army, USN, USMC, US Coast Guard [USCG] and USAF. Veterinary support is also provided upon request and subject to availability of resources for government-owned animals of other federal agencies (such as the Drug Enforcement Agency [DEA] or US Border Patrol). In some instances, it is also provided to allies, coalition partners, or HN agencies.

b. Veterinary support in the TO includes the—

- Inspection of subsistence (Class I).
- Inspection and approval of locally procured food, dairy products, and bottled water plants in the TO.
- Examination of food animals and other food sources.

- Control of zoonotic diseases.
- Treatment and hospitalization for government-owned animals and unit mascots.

NOTE

In operations where the anticipated duration of the operation is sufficient to establish base camps of a semifixed nature, soldiers have a tendency to adopt local domestic and/or wild animals (such as the mongoose during the Vietnam War) as unofficial mascots. The command should establish a policy and provide guidance on this issue prior to deployment. The unofficial mascot has the potential to be a significant medical threat in the transmission of zoonotic diseases to US forces.

- Examination and wholesomeness determination of food and food-producing animals in an NBC environment.
 - Other veterinary PVNTMED activities as assigned.
- c. Normally, the staff veterinarian advises the commander on matters pertaining to—
- Food safety and quality assurance to include operations under NBC conditions.
 - The health of government-owned and indigenous animals of the command.
- d. For additional information on veterinary support activities, refer to AR 40-70, AR 40-656, AR 40-657, AR 40-905, and FM 8-10-18.

5-9. Combat Operational Stress Control

a. Advances in technology are continually changing the way warfare is conducted. The operational tempo (OPTEMPO) has increased dramatically. On the modern battlefield, US forces will be required to conduct continuous operations while executing the offense or defense. Leaders must, therefore, ensure that troops rest and are resupplied on the run. (See FM 21-10 and FM 6-22.5 for minimum sleep requirements.) They must think faster, make decisions more rapidly, and act more quickly than the enemy. Leaders must know the commander's intent. They must be able to act spontaneously and synchronously, even though the situation has changed and communications are disrupted. The demands on CSS units will be equally extreme. If NBC weapons are employed, the stressors on the integrated battlefield will be incalculably greater. Exhausted and attrited units must be reconstituted and returned quickly to the battle. In stability operations and support operations, the terrorist or guerrilla also counts on causing stress to the enemy as his principal weapon and objective. Although the stressors of terrorism and/or guerrilla tactics

are less overwhelming than those of full spectrum warfare, they are deliberately designed to cause the breakdown of professionalism and discipline.

b. It is the responsibility of leadership to control stress. Army Medical Department personnel in unit MH sections and in specialized CSC units assist the command in—

- Preventing battle fatigue (BF) and misconduct stress behaviors.
- Treating patients suffering from BF or neuropsychiatric (NP) disorders.
- Returning soldiers to duty or determining their disposition.
- Evaluating soldiers who display misconduct stress behaviors.
- Evacuating patients with NP disorders who cannot RTD.

c. Refer to FM 6-22.5, FM 8-51, and FM 22-51 for additional information on COSC operations.

5-10. Health Service Logistics

a. The HSL system encompasses the planning and execution of medical supply operations, medical equipment maintenance and repair, optical fabrication and repair, contracting services, regulated medical or hazardous waste management and disposal, and production and distribution of medical gases. The HSL system also involves the management of blood and blood products, to include blood-banking services for the Army and the other Services, and when authorized allied, coalition, and HN forces under the technical guidance of the appropriate command surgeon. The HSL system is modular in design and provides tailorable support across the operational continuum. The modular design of HSL units facilitates task organization to support varied missions and enables the successful accomplishment of split-base operations.

b. In joint operations, the combatant commander may designate one Service as the SIMLM for all Services operating within the AO. The SIMLM functions encompasses the provision of medical supplies, medical equipment maintenance and repair, blood management, and optical fabrication to all joint forces within the TO including, on an emergency basis, USN ships for common-use items. By exercising directive authority over the HSL arena for the accomplishment of assigned missions, the combatant commander can centralize control, reduce duplication of services, and provide the support in a more economical and efficient manner.

c. For additional information on HSL and blood management, refer to Joint Pub 4-02, Joint Pub 4-02.1, FM 4-02.1, FM 4-02.70, FM 8-10-9, TM 8-227-3, TM 8-227-11, and TM 8-227-12.

5-11. Medical Laboratory Services

a. Medical laboratory services in a TO are designed to enhance diagnostic capabilities and to identify suspect BW and CW agents.

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b. The function of a medical laboratory in support of an MTF is to analyze body fluids and tissues, or to identify microorganisms as an adjunct in the diagnosis and treatment of patients and in the prevention of disease. Additionally, the management of blood and blood components are critical tasks requiring medical laboratory and HSL assets.

c. The primary mission of the area medical laboratory (AML) focuses on the identification and evaluation of OEH hazards in the AO through accurate field confirmatory laboratory testing of suspect BW and CW agents, endemic disease, zoonotic disease and occupational and environmental agents.

d. For additional information on medical laboratory capabilities refer to FM 4-02.6, FM 4-02.7, FM 4-02.24, FM 8-10-14, FM 8-10-15, FM 8-42, FM 8-43, and FM 8-55.

CHAPTER 6

FORCE HEALTH PROTECTION IN GLOBAL OPERATIONS

6-1. The Continuum

a. Modern warfare will combine elements of traditional combat formations, task-organized elements, and newly designed units. The force projection units and comprehensive OPLANs must be flexible and have the capability to adapt to changing battlefield conditions. Additionally, units and plans must be capable of transitioning from one peacetime/wartime scenario to another or participating in different types of operations simultaneously (such as performing humanitarian assistance operations while conducting tactical operations).

b. For an in-depth discussion of TTPs for the medical platoon of maneuver units refer to FM 4-02.4 and for division and nondivisional medical companies refer to FM 4-02.6.

6-2. Offensive Operations

a. *Support to the Offensive Operations.*

(1) The offense is the decisive form of war, the commander's only means of attaining a positive goal or of completely destroying an enemy force. The offense is characterized by rapid movement, deep penetrations, aggressive action, and the ability to sustain momentum regardless of counterfires and countermeasures.

(2) When considering the HSS plans to support an offensive action, the HSS planner must consider many factors (FM 8-55). The forms of maneuver, as well as the enemy's capabilities, influence the character of the patient workload and its time and space distribution. The analysis of this workload determines the allocation of HSS resources and the location or relocation of MTFs.

(3) Global force health protection of offensive operations must be responsive to several essential characteristics. As operations achieve success, the areas of casualty density move away from the supporting facilities. This causes the routes of medical evacuation to lengthen. Heaviest patient workloads occur during disruption of enemy main defenses, at terrain or tactical barriers, during the assault on final objectives, and during enemy counterattacks. The accurate prediction of these workload points by the HSS planner is essential if HSS operations are to be successful.

(4) In traditional combat operations, the major casualty area of the division is normally the zone of the main attack. As the main attack accomplishes the primary objective of the division, it receives first priority in the allocation of combat power. The allocation of combat forces dictates roughly the areas which are likely to have the greatest casualty density. As a general rule, all division MTFs are located initially as far forward as combat operations permit. This allows the maximum use of these facilities before lengthening evacuation lines force their displacement forward.

(5) In operations that feature deep battles with NBC weapons targeted at supporting logistical bases, mass casualty operations may be conducted in rear areas.

(6) As advancing combat formations extend control of the battle area forward, supporting HSS elements overtake patients. This facilitates the acquisition of the battle wounded and reduces the vital time elapsed between wounding and treatment. In offensive operations, two basic problems confront the supporting HSS units. First, contact with the supported unit must be maintained. Responsibility for the contact follows the normal HSS pattern—rear to front. The contact is maintained by forward deployed air and ground evacuation resources. Secondly, the mobility of the MTFs supporting the combat formations must be maintained. Periodically, division medical companies, FSTs, and CSHs are cleared so that they may move forward. This requirement for prompt evacuation of patients from forward MTFs requires available ambulances to be echeloned well forward from the outset. The requirement for periodic movement of large numbers of patients from divisional and corps facilities further stresses the evacuation system.

(7) Types of operations in the offense include—

(a) *Movement to contact.* Health service support in movement to contact is keyed to the tactical plan. Prior deployment of evacuation resources and comprehensive rehearsals with parent and supported units permits uninterrupted and effective evacuation support.

(b) *Exploitation.* Exploitation is a type of offensive operation that rapidly follows a successful attack and is designed to disorganize the enemy in depth. Medical evacuation support of exploitation and pursuit operations resembles those discussed for the envelopment (paragraph 6-2b(1)(b) below). Since exploitation and pursuit operations can rarely be planned in detail, medical evacuation operations must adhere to TSOPs and innovative C2. These actions are often characterized by—

- Decentralized operations.
- Unsecured ground evacuation routes.
- Exceptionally long distances for evacuation.
- Increased reliance on convoys and air ambulances.

(c) *Pursuit.* The pursuit is designed to catch or cut off a hostile force attempting to escape with the aim of destroying it.

b. *Health Service Support for Choices of Maneuver and Enabling Operations.*

(1) *Choices of Maneuver.*

(a) *Penetration.* In this tactic, the attack passes through the enemy's principal defensive position, ruptures it, and neutralizes or destroys the enemy forces. Of all forms of offensive maneuver, the penetration of main enemy defenses normally produces the heaviest medical evacuation workload. Patient acquisition starts slowly, but becomes more rapid as the attack progresses. The evacuation routes lengthen as the operation progresses. The penetration maneuver is often preceded by heavy preparatory fires which may evoke heavy return fire. These enemy fires may modify the decision to place medical evacuation assets as far forward as possible. Medical evacuation may be slow and difficult due to damage to roads or the

inaccessibility of patients. Medical evacuation support problems multiply when some combat units remain near the point of original penetration. This is done to hold or widen the gap in enemy defenses while the bulk of the division forces exploit or pursue the enemy. Treatment elements are placed near each shoulder of the penetration; ground evacuation cannot take place across an avenue of heavy combat traffic. Besides the heavy traffic, the area of the penetration is normally a target for both conventional and NBC weapons.

(b) *Envelopment.* In the envelopment, the main or enveloping attack passes around or over the enemy's principal defensive positions. The purpose is to seize objectives which cut his escape routes and subject him to destruction in place from flank to rear. Since the envelopment maneuver involves no direct breach of the enemy's principal defensive positions, the medical evacuation system is not confronted with a heavy workload in the opening phase. Ambulances are echeloned well forward in all levels of care to quickly evacuate the patients generated by suddenly occurring contact. Medical treatment facilities moving with their respective formations overtake patients during evacuation and reduce delays in treatment. After triage and treatment, the patients are evacuated to corps-level facilities by accompanying corps assets. When the isolated nature of the envelopment maneuver precludes prompt evacuation, the patients are carried forward with the treatment element. Again, nonmedical vehicles may be pressed into emergency use for this purpose. When nonmedical vehicles are used to move patients, augmentation with medical personnel or CLSs should be considered and when tactically feasible, implemented. When patients must be carried forward with the enveloping forces, HSS commanders use halts at assembly areas and phase lines to arrange combat protection for ground ambulance convoys to effect evacuation through unsecured areas. Further, the commander may take advantage of friendly fires and suppression of enemy air defenses to call for prearranged air ambulance support missions, or emergency use of medium-lift helicopter backhaul capabilities.

(c) *Infiltration.*

1. Infiltration is a choice of maneuver used during offensive operations. The division can attack after infiltration or use it as a means of obtaining intelligence and harassing the enemy. Though it is not restricted to small units or dismounted actions, the division employs these techniques with a portion of its units, in conjunction with offensive operations conducted by the remainder of its units.

2. Health service support of infiltration is restricted by the amount of medical equipment, supplies, and transportation assets that can be introduced into the attack area. No deployment of division-level medical units without their organic transportation should be attempted. Elements of unit-level HSS should be accompanied by their organic vehicles, and ambulances should receive priority for deployment. It may be necessary to man-carry enough BAS equipment into the attack area to provide EMT and ATM; however, this results in degrading mobility. When the element is committed without its ambulances, patients are evacuated to the BAS by litter bearer teams. This requires reinforcement of the medical platoon by division or corps medical personnel or improvisation of litter teams using combat troops (if available and approved by the tactical commander). Medical evacuation from the BAS and medical resupply of the force may be provided by litter bearers, depending upon distances and degree of secrecy required.

3. When airborne and air assault forces are used, infiltrating elements may land at various points within the enemy's rear area and proceed on foot to designated attack positions. As in

surface movement, the amount of medical equipment taken may be limited. In airborne operations, the evacuation of patients will be by litter bearers or ground ambulances to CCPs or the BAS and then by division-level ambulances to the Level II MTF. In air assault operations, the evacuation is by litter bearers to CCPs or to the BAS and then by air ambulances to a Level II MTF. Once the combat element begins the assault on the objective, secrecy is no longer important and its isolated location requires HSS characteristic to airborne and air assault operations until ground linkup.

(d) *Turning movement.* The turning movement is a variant to the envelopment in which the attacker attempts to avoid the defense entirely; rather, the attacker seeks to secure key terrain deep in the enemy's rear and along his LOCs. Faced with a major threat to his rear, the enemy is thus *turned* out of his defensive positions and forced to attack rearward at a disadvantage.

- General MacArthur's invasion at Inchon during the Korean War is an example of a classic turning movement. Casualties were initially light as the main defenses were avoided; however, as the invasion developed, resistance stiffened and higher casualty rates were experienced. Further, as fighting occurred in a populated area (Seoul), significant civilian casualties resulted. The lack of Korean health care providers caused many of these civilians to seek medical aid from US field medical units.

- Medical evacuation support to the turning movement is provided basically in the same manner as to the envelopment. As the operation is conducted in the enemy's rear area, LOCs and evacuation routes may be unsecured resulting in delays in resupply and evacuation. In the Inchon example, a hospital ship was located off the coast to accept patients evacuated from the fighting. However, due to the precarious tides, evacuation and resupply were often delayed for hours and sometimes days since the harbor could not be navigated by small vessels. It was not until Kimpo Airfield fell that timely evacuation could occur. The deployed HSS units must be able to quickly clear the battlefield of patients, evacuate them from the forward areas, and sustain the patients in rear areas until evacuation routes are established. Augmentation of medical treatment personnel may be required if patients are to be held and sustained for an extended period in the rear area pending medical evacuation. This possibility should be included as a consideration during course of action (COA) development.

(2) *Enabling Operations.*

(a) *Passage of lines.* This situation presents a challenge for the HSS planner. There will be a number of medical evacuation units using the same air and road networks. Coordination and synchronization are essential if confusion and overevacuation are to be avoided. The information required to operate in the division AO includes—

- Radio frequencies and call signs.
- Operations plans and TSOPs.
- Location of MTFs.
- Location of CCPs and ambulance exchange points (AXPs).

- Main supply route, forward arming and refueling points (FARP), and Army air space command and control (A2C2) data.

(b) *Security operations.* The covering forces are dependent upon organic resources found in the maneuver battalion medical platoon for initial support. The level of command for the covering force (division or corps) determines the responsibility for the subsequent evacuation plan. In a corps covering force, for example, the corps HSS structure has the responsibility for establishing and operating the medical evacuation system to support the forward deployed corps forces. This is done to prevent the divisions following the covering forces from becoming overloaded with patients prior to the hand off and passage of lines. The use of CCPs, AXPs, and nonmedical transportation assets (casualty evacuation [CASEVAC]) to move the wounded is essential. The covering force battle may be extremely violent. Patient loads will be high and the distance to MTFs may be much longer than usual. The effectiveness of the medical evacuation system depends upon the forward positioning of a number of ground ambulances and the effective integration of corps air ambulances into the medical evacuation plan.

(c) *Advance, flank and rear guards.* These forces normally receive medical evacuation support through the attachment of evacuation teams. The teams evacuate patients to predesignated CCPs along a main axis of advance or to the nearest treatment element providing area support. Employment of air ambulances provides a measure of agility and flexibility.

(d) *River crossing operations.* The river barrier itself exerts decisive influence on the use of divisional medical units. Attack across a river line creates a HSS delivery problem comparable to that of the amphibious assault. Health service support elements cross as soon as combat operations permit. Early crossing of treatment elements reduces turnaround time for all crossing equipment that is used to load patients on the far shore. Maximum use of air ambulance assets is made to prevent excessive patient buildup in far shore treatment facilities. Near shore MTFs are placed as far forward as assault operations and protective considerations permit to reduce ambulance shuttle distances from off-loading points. For detailed information on river crossing operations, refer to FM 90-13.

(e) *Reconnaissance operations.* The reconnaissance in force is an *attack* to discover and test the enemy's position and strength or to develop other intelligence. The division usually probes with multiple combat units of limited size, retaining sufficient reserves to quickly exploit known enemy weaknesses. Health service support techniques follow those discussed for a movement to contact (paragraph 6-2a[7]). Ambulances are positioned well forward at both unit and division levels (Levels I and II). Ambulances are moved at night to enhance secrecy. The echeloning of ambulances is an indication to the enemy that an attack is imminent due to the forward placement of these resources. Level II MTFs are not established until a significant patient workload develops. Patients received at BASs of reconnoitering units are evacuated to Level II MTFs as early as practical, or are carried forward with the force until a suitable opportunity for evacuation presents itself. Maximum possible use of air ambulance assets is made to cover extended distances and to overcome potentially unsecured ground evacuation routes.

(f) *Unified action.* The majority of operations occurring at the present time are joint, interagency, or multinational operations. The HSS planner must determine in the initial planning stages of these operations whose responsibility it is to provide HSS to the force. The HSS planner must also ensure that duplications in support do not exist, guidelines are established as to eligible beneficiaries and when

individuals are to be returned to their own nation's health care delivery system, and what mechanisms exist for reimbursement of services. For additional information, refer to FM 8-42.

6-3. Defensive Operations

There are three forms of the defense: area defense, mobile defense, and retrograde. The area defense concentrates on denying enemy access to designated terrain for a specific period of time, rather than on the outright destruction of the enemy. The mobile defense focuses on denying the enemy force by allowing him to advance to a point where he is exposed to a decisive counterattack by the striking force. The primary defeat mechanism, the counterattack, is supplemented by the fires of the fixing force. The third form of defense is the retrograde. The retrograde is an organized movement to the rear and away from the enemy. The enemy may force these operations or a commander may execute them voluntarily. Within the retrograde operation there are three forms: delay, withdrawal, and retirement.

a. The provision of timely and effective HSS presents challenges to the medical planner in defensive operations. The patient load reflects lower casualty rates, but forward area patient acquisition is complicated by enemy actions and the maneuver of combat forces. Medical personnel are permitted much less time to reach the patient, complete vital EMT, and remove him from the point of injury. Increased casualties among exposed medical personnel further reduce the medical treatment and evacuation capabilities. Heaviest patient workloads, including those produced by enemy artillery and NBC weapons, may be expected during the preparation or initial phase of the enemy attack and in the counterattack phase. The enemy attack may disrupt ground and air routes and delay evacuation of patients to and from treatment elements. The depth and dispersion of the defense create significant time and distance problems for evacuation assets. Combat elements may be forced to withdraw while carrying their remaining patients to the rear. The enemy exercises the initiative early in the operation which may preclude accurate prediction of initial areas of casualty density. This makes the effective integration of air assets into the evacuation plan essential. The use of air ambulances must not only be integrated into the HSS annex to the OPOD, but also into the A2C2 system.

b. The support requirements for retrogrades may vary widely depending upon the tactical plan, the enemy reaction, and the METT-TC factors. Firm rules that apply equally to all types of retrograde operations are not feasible, but considerations include—

- Requirement for maximum security and secrecy in movement.
- Influence of refugee movement that may impede medical evacuation missions conducted in friendly territory.
- Integration of evacuation routes and obstacle plans should be accomplished.
- Difficulties in controlling and coordinating movements of the force which may produce lucrative targets for the enemy.
- Movements at night or during periods of limited visibility.

- Time and means available to remove patients from the battlefield. In stable situations and in the advance, time is important only as it affects the physical well-being of the wounded. In retrograde operations, time is more important. As available time decreases, HSS managers at all levels closely evaluate the capability to collect, treat, and evacuate all patients.

- Medical evacuation routes will also be required for the movement of troops and materiel. This causes patient evacuation in retrograde movements to be more difficult than in any other type of operation. Command, control, and communications may be disrupted by the enemy. Successful medical evacuation requires including ambulances on the priority list for movement; providing for the transportation of the slightly wounded in cargo vehicles (CASEVAC); and providing guidance to subordinate commanders defining their responsibilities in collecting and evacuating patients. Special emphasis must be placed on the triage of patients and consideration given to the type of transportation assets available for evacuation.

- When the patient load exceeds the means to move them, the tactical commander must make the decision as to whether patients are to be left behind. The medical staff officer keeps the tactical commander informed in order that he may make a timely decision. Medical personnel and supplies must be left with patients who cannot be evacuated.

6-4. Stability Operations

a. Stability operations apply military power to influence the political environment, facilitate diplomacy, and interrupt specified illegal activities. They include both developmental and coercive actions. *Developmental actions* enhance a government's willingness and ability to care for its people. *Coercive actions* apply carefully prescribed limited force and the threat of force to achieve objectives. The types of activities conducted in stability operations include—

- Peace operations (to include peacekeeping operations, peace enforcement operations, and operations in support of diplomatic efforts).

- Foreign internal defense (categories of operations include indirect support, DS [not involving combat operations], and combat operations).

- Combatting terrorism operations (which includes counterterrorism and antiterrorism [Appendix H]).

- Support to counterdrug operations.
- Security assistance.
- Noncombatant evacuation operations (NEO).
- Humanitarian and civic assistance (HCA).
- Arms control.

FM 4-02

- Support to insurgencies.
- Shows of force.

b. Health service support to forces deployed in stability operations is dependent upon the specific type of operation, anticipated duration of the operation, medical threat, number of forces deployed, theater evacuation policy, medical troop ceiling, and anticipated level of violence. In most situations, HSS follows the traditional support provided to combat forces. If there is a shortened theater evacuation policy, a limited medical troop ceiling, and limited hospitalization assets within the AO, organic and DS ambulance support is provided from the point of injury to the supporting Levels I or II MTF and, once the patient is stabilized for further evacuation, from the treatment element to an airfield for evacuation out of the theater. Preventive medicine resources should be included early on in the operational planning process to reduce the effect of the medical threat on deploying forces.

(1) During NEO, those persons who are injured, wounded, or ill are treated and stabilized by the medical element accompanying the NEO force. Once stabilized, they are evacuated by the NEO force. In NEO conducted in a permissive environment (no apparent physical threat to the evacuees), sick, injured, or wounded persons should be evacuated on dedicated medical evacuation platforms, if at all possible. In an uncertain or hostile environment, the transportation assets used to insert and extract the NEO force are normally used to evacuate the patients. The medical personnel accompanying the force provide en route medical care until the NEO force reaches an ISB or safe haven. Those evacuees requiring medical care are provided the required care or are stabilized for further evacuation to MTFs capable of providing the required care.

(2) During combatting terrorism operations, planning considerations for HSS include—

- Using medical and nonmedical transportation assets to evacuate casualties in mass casualty situations. If nonmedical assets are used, planning should include augmenting these assets with medical personnel to provide en route medical care. Refer to STANAG 2068, FM 4-02.6, and FM 8-42 for a discussion of mass casualty operations.
- Applying techniques for acquiring, treating, and evacuating patients under hostile fire or on adverse terrain (from rubble or from above or below ground level).
- Ensuring security measures (such as establishing checkpoints, screening personnel and vehicles, and limiting access to the MTF area) are implemented.

(3) For additional information, refer to FM 8-42.

6-5. Support Operations

Support operations provide essential supplies and services to assist designated groups. They are conducted mainly to relieve suffering and help civil authorities respond to crises. In most cases, Army forces achieve success by overcoming conditions created by man-made or natural disasters. The ultimate goal of support

operations is to meet the immediate needs of designated groups and transfer responsibility quickly and efficiently to appropriate civilian authorities. There are two types of support operations which are DSO and foreign humanitarian assistance (FHA).

a. Army support to DSO supplements efforts and resources of state and local governments and organizations. A Presidential Declaration of a major disaster or emergency usually proceeds a DSO. Domestic support operations require extensive coordination and liaison among many organizations such as joint, interagency, and state and local governments. The Federal Response Plan (FRP) provides a national-level architecture to coordinate actions of all supporting federal agencies. The forms of support in DSO encompass—

- Relief operations. These operations are in response to man-made or natural disasters. The Army assists the state and local governments to restore or recreate essential infrastructure (such as power generation, water supply, sanitation systems, and medical care facilities and services). Humanitarian relief focuses on the well-being of supported populations. These activities normally occur simultaneously.

- Support to domestic chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE) consequence management. Incidents involving CBRNE may be deliberate or unintentionally initiated. The result, regardless of what initiated the incident, produces catastrophic loss of life or property. When directed by DOD, Army forces assist civil authorities in protecting US territory, population, and infrastructure before an attack by supporting domestic preparedness and protecting critical assets. (Refer to FM 3-11.21 for NBC aspects of consequence management.)

- Domestic preparedness efforts of local, state, or federal personnel/organizations is enhanced with training from US Army sources and cooperative efforts of the AMEDD to provide courses on the medical management of NBC casualties.

- Terrorists or hostile forces may attack facilities essential to society, the government, and the military, such as the destruction of the World Trade Center in New York on September 11, 2001 and the attack on the Pentagon in Washington, D.C. Department of Defense Directive 5160.54 identifies specific civil infrastructure assets necessary to conduct military operations. In conjunction with civil law enforcement, Army forces may protect these assets or temporarily restore lost capability.

- When a CBRNE incident occurs, local authorities will be the first to respond to the incident. If federal assistance is required, other government agencies (rather than the military) have primary responsibility for responding to domestic CBRNE incidents. However, Army forces have a key supporting role and can quickly respond when authorized. Additionally the President and SECDEF can authorize Army assets to assist a foreign government after a CBRNE incident. Such assistance may be linked to concurrent relief operations. In CBRNE response to domestic support operations, the US Army Medical Command (USAMEDCOM) can provide large-scale medical care and support. (Refer to Appendix I for information on requesting support.) Its experienced clinicians, planners, and support staffs can furnish assessment, consultation, triage, medical treatment and trauma care, hospitalization, and follow-up care for chemical and biological casualties. The Army can deploy and establish a hospital in a field environment or it can medically evacuate victims to a USAMEDCOM fixed facility. Further, the USAMEDCOM has special medical augmentation response teams (SMARTs) that can rapidly deploy to

an incident site to provide consultation and assistance on medical issues. (For additional information on the types of SMARTs that are maintained, refer to Appendix I of this manual and FM 8-42.)

- Support to civil law enforcement. Army support is provided, when authorized and governed by the Posse Comitatus Act, during counterterrorism activities, counterdrug operations, military assistance during civil disturbances, and general support. Army National Guard units in a state status can be a particularly useful military resource. They may be able to provide assistance to civil authorities when federal units cannot due to the Posse Comitatus Act.

- Community assistance. This is a broad range of activities that provide support and maintain a strong connection between the military and the civilian community. An example of an AMEDD community assistance mission is the Military Assistance to Safety and Traffic (MAST) program, where an air ambulance unit provides evacuation support to the nearby civilian community. (For additional information, refer to AR 500-4, FM 8-10-6, and FM 8-10-26.)

b. Army forces usually conduct FHA operations to relieve or reduce the results of natural or man-made disasters. They also relieve conditions (such as pain, hunger, or disease) that present a serious threat to life or loss of property. Foreign humanitarian assistance is limited in scope and duration. It focuses on prompt aid to resolve an immediate crisis. In FHA, the most frequently conducted form of support is relief operations, however, FHA may also involve support to incidents involving CBRNE and community assistance.

CHAPTER 7

HEALTH SERVICE SUPPORT IN INTERAGENCY AND
MULTINATIONAL OPERATIONS**7-1. Interagency and Multinational Environments**

a. Army operations conducted in today's global environment will normally not be unilateral in nature. The Army HSS planner must be prepared to support a wider community of eligible beneficiaries, as determined by the—

- Type of operation (such as FHA, disaster relief, or peacekeeping).
- Anticipated duration of the operation. (The longer the operation continues the more resources are required and a larger theater CSS footprint is established.)
- Types of forces to be supported. (This includes sister Services, HN, allies, coalition partners, DOD contractors, DOD civilian employees, civilian employees from other Federal agencies, international organizations [such as the UN], NGOs, and HN or third country civilians.)
- Law of Land Warfare (Chapter 4), treaties, agreements, regulations, and policies.
- Civilian considerations.

b. Prior to initiation of an operation, a determination of eligible beneficiaries is required to ensure that adequate HSS resources are planned for and deployed to manage the anticipated medical work load. The eligible beneficiary determination is also required to ensure that those receiving treatment and other medical support are legally entitled to the care/treatment and that appropriate fund sources are used. (Refer to Appendix G for a discussion on eligibility for care determinations.)

7-2. Interagency Operations

a. Interagency operations facilitate the implementation of all elements of national power. Interagency operations are critical to achieving the strategic end state, especially in stability operations and support operations. The Army often operates in an interagency environment alongside other agencies/organizations of the US Government. This occurs when the military is the prime strategic option, as it is in war, but also when other instruments of national power are the preferred option and the military assists with accomplishment of the mission.

b. Interagency operations facilitate unity and consistency of effort, maximize the use of national resources, and reinforce the primacy of diplomatic elements. The DOD and the CJCS coordinate interagency operations at the strategic level. This coordination establishes the framework for coordination by commanders at the operational and tactical levels.

c. The lead agency is determined by the type of operation and the agencies involved. In domestic support operations, specifically disaster relief, the Federal Emergency Management Agency (FEMA) is the lead agent in coordinating the relief activities.

d. The requirements for the use of HSS assets and/or resources will vary on the type and duration of the operation and the availability of medical resources. For example, as the Army is the DOD Executive Agent for Veterinary Services, a requirement for animal care of government-owned animals used in interagency operations (drug enforcement, disaster relief, or patrolling operations) may become the responsibility of the AMEDD.

7-3. Multinational Operations

a. The types of multinational force structures are alliances and coalitions. These forces must create a structure that meets the needs, diplomatic realities, constraints, and objectives of the participating nations. (Multinational operations however may also be conducted under the auspices of an international organization, such as the UN. Forces participating in these sponsored operations do so under the direction/structure prescribed.)

(1) *Alliances*. Alliances are long-standing agreements between or among nations for the attainment of broad, long-term objectives. An example of an alliance is NATO.

(2) *Coalitions*. Coalitions, on the other hand, are ad hoc agreements between two or more nations for a common action (the attainment of a short-term objective).

b. The C2 of multinational operations differs with the type of multinational force.

(1) *Alliances*.

(a) Alliances are characterized by years of cooperation among nations. In alliances—

- Agreed-upon objectives exist.
- Standard operating procedures have been established.
- Appropriate plans have been developed and exercised among the participants.
- A developed TO exists, some equipment interoperability exists, and command relationships have been firmly established.

(b) Alliances are normally organized under an integrated command structure that provides unity of command in a multinational setting. The key ingredients in an integrated alliance command are that a single commander will be designated, that his staff will be composed of representatives from all member nations, and that subordinate commands and staffs will be integrated to the lowest echelon necessary to accomplish the mission.

(c) Another form of alliance is the lead nation command structure. This structure may exist in a developing alliance when all member nations place their forces under the control of one nation. This means that the lead nation's procedures and doctrine form the basis for planning and coordinating the

conduct of operations. Although this type of arrangement is unusual in a formal alliance, such a command structure may have advantages under certain treaty circumstances. A lead nation command in an alliance may be characterized by a staff that is integrated to the degree necessary to ensure cooperation among multinational or national subordinate army formations.

(2) *Coalitions*. Coalitions are normally formed as a rapid response to an unforeseen crises and, as stated above, are ad hoc arrangements between two or more nations for a common action.

(a) During the early stages of such a contingency, nations rely upon their military command systems to control the activities of their forces. Therefore, the initial coalition arrangement will most likely involve a parallel command structure. (Under a parallel command, no single multinational army commander is designated.) Usually member nations retain control of their national forces. Coalition decisions are made through a coordinated effort among the participants. A coalition coordination, communications, and integration center (C3IC) can be established to—

- Facilitate exchange of intelligence and operational information.
- Ensure coordination of operations among coalition forces.
- Provide a forum for resolving routine issues among staff sections.

(b) As a coalition matures, the members may choose to centralize their efforts through establishing a lead nation command structure. A lead nation command is one of the less common command structures in an ad hoc coalition. A coalition of this makeup sees all coalition members subordinating their forces to a single partner, usually the nation providing the preponderance of forces and resources. Still, subordinate national commands maintain national integrity. The lead nation command establishes integrated staff sections, with the composition determined by the coalition leadership.

7-4. Planning Considerations

a. Planning for interagency and multinational operations follow the fundamental principles of the military decision-making process (MDMP) including HSS estimate and plan. Planning checklists for missions conducted in a joint or multinational environment are provided in Appendix G.

b. Refer to Joint Pubs 4-02, 4-02.1, and 4-02.2, and FMs 8-42, 8-55, for additional information on planning.

7-5. Rationalization, Standardization, and Interoperability in Multinational Operations

One of the most difficult aspects of multinational operations concerns the RSI of equipment, supplies, and procedures. This task is compounded by differences in terminology, language, and doctrine.

a. *Communications*. To ensure mission success, it is imperative that communications are quickly established with all participating Services, agencies, or nations.

(1) Initial communications can be facilitated by exchanging liaison teams who will have direct interface with the operation's participants. When possible, liaison personnel should be deployed early in the planning/organization phase of the operation.

(2) Compatible communications equipment may pose a severe problem for a multinational force. Even within joint and interagency operations, the US experiences interoperability problems with communications equipment; these difficulties are magnified when US forces are engaged in multinational operations. Depending upon the size of the multinational force, one nation may be required to provide communications equipment to all elements for C2 purposes. Depending upon the topography in the AO and dispersion of forces, the planning for and effective use of messengers and wire communications may also assist in alleviating this situation.

This paragraph is in consonance with NATO STANAG 2131.

(3) A glossary of standardized operational and medical terminology and their definitions must be compiled. Due to differences in language, translation, and usage, the operational and medical terminology of one nation may not be understood by one or more of the coalition partners. By providing a reference guide of operational terms, misinterpretation can be minimized and can aid in the synchronization of military efforts. North Atlantic Treaty Organization STANAG 2131 (DA Pamphlet 40-3) provides a multilingual medical phrase book which contains basic medical questions in some of the languages of the NATO nations. If the languages addressed in this phrase book do not include the phrases in all the languages of the multinational force, it should be supplemented with the appropriate information.

b. Standardization. Within alliances, standardization can be accomplished in many areas. The specifications and requirements for equipment, treatment protocols, and procedures can be developed by working groups and adopted for use by each nation. An example of this is the NATO standard litter which can be interchangeably used in all ambulances employed by the member nations. In coalitions there is not sufficient time permitted to reach standardization agreements of this nature. Due to the short duration and limited purpose of these arrangements, there is usually only sufficient time to standardize principles and time-sensitive procedures, such as report formats or radio frequencies to be used, rather than materiel development issues. Whenever possible, international standardization agreements (ISAs) (such as NATO STANAGs and ABCA Armies QSTAGs) should be used as a starting point for coalition standardization. As mentioned earlier, those agreements pertaining to policy, procedures, and treatment protocols are more easily adapted to the coalition operation.

c. Command and Control. As coalitions are ad hoc agreements of countries sharing a common interest, it may not be possible to establish C2 over all participants, as each nation may have its own specific requirements which limit the authority it will permit international or national commanders to exercise over its forces. Thus, command in the formal sense may not exist, and a system of cooperation may be required in its place. Hasty agreements must be made to formulate workable methods. These are always specific to the situation and must be decided by commanders and staffs, taking into consideration the mission, requirements, and capabilities of the participating forces. Regardless of the type organization and/or

agreements made by the coalition forces, specific guidance must be provided to the various national contingents as to how the coalition will operate.

d. Rationalization. Rationalization consists of those actions that increase the effectiveness of coalition forces through more efficient or effective use of defense resources committed to the coalition. Rationalization applies to both weapons and materiel resources and nonweapons military measures. As the US is a signatory of the Geneva Conventions, the provisions of these conventions must be adhered to by US forces. Specific information on the protected status of medical personnel, self-defense and the defense of patients in their care, and the protected status of medical facilities, vehicles, aircraft, and medical materiel is provided in Chapter 4.

CHAPTER 8

DOMESTIC SUPPORT OPERATIONS

8-1. Support Operations

Support operations use Army forces to assist civil authorities, foreign and domestic, as they prepare to respond to crises and relieve suffering. In support operations, Army forces provide essential support, services, assets, or specialized resources to help civil authorities deal with situations beyond their capabilities. The purpose of support operations is to meet the immediate needs of designated groups for a limited time, until civil authorities can do so without Army assistance. Support operations conducted in the United States, its territories and possessions are referred to as DSO. For additional information on support operations refer to FM 3-0 and FM 100-19.

8-2. Domestic Support Operations

a. Army support to DSO supplements the efforts and resources of state and local governments and organizations. A presidential declaration of a major disaster or emergency usually precedes DSO. Domestic support operations require extensive coordination and liaison among many organizations—interagency, joint, active duty, reserve, and National Guard units—as well as with state and local governments. The FRP provides a national-level architecture to coordinate the actions of all supporting federal agencies.

b. Although the Constitution permits the use of Army forces to protect the states against invasion and, upon request of a state, to provide the nation with critical capabilities, such as missile defense, necessary to secure and defend the homeland. It is the responsibility of civil authorities to preserve public order and carry out governmental operations within their jurisdiction. Restrictions on the use of Army forces providing assistance to civil authorities are contained in the Posse Comitatus Act, as amended, and the Stafford Act. The primary reference for military assistance to civil authorities is DODD 3025.15. It is wide-ranging, addressing such actions as civil disturbance control, counterdrug activities, combatting terrorism and law enforcement. In DSO, Army forces always support civil authorities—local, state, and federal.

8-3. Domestic Support Operations Missions

During DSO, Army forces perform relief operations, support to CBRNE consequence management, support to civil law enforcement, and community assistance.

a. Relief Operations. Relief operations may be required in response to natural or man-made disasters. Civil authorities are responsible for restoring essential services in the wake of the incident. To assist the civil authorities in accomplishing this action, the President can deploy Army forces.

(1) Disaster relief. Disaster relief involves the restoration of critical infrastructure such as hospitals and other health care facilities, water and sewage systems, electricity, and communications capabilities. It includes establishing and maintaining the minimum safe working conditions necessary to protect relief workers and the affected population.

(2) Humanitarian relief. This focuses on those lifesaving measures that alleviate the immediate needs of the population in crisis. Civilian relief organizations (governmental or nongovernmental) are best suited to provide this type of relief. Army forces conducting humanitarian relief usually facilitate civil relief efforts. Activities within these types of operations include the provision of medical care and medications, food, water, clothing, blankets, and shelter.

b. Support to Domestic CBRNE Consequence Management. Support to CBRNE incidents may be required due to the deliberate or unintentional events involving a release or use of CBRNE agents that produce catastrophic loss of life and property.

(1) Domestic preparedness. This encompasses all activities that prepare the nation to rapidly respond to natural or man-made disasters and to terrorist or weapons of mass destruction (WMD) incidents. The pillars of domestic preparedness include training, exercises, expert assistance, and response.

(2) Protection of critical assets. Hostile forces (including terrorists) may attack facilities essential to society, the government, and the military. These assaults can disrupt civilian commerce, government operations, and military capabilities. Department of Defense Directive 5160.54 identifies specific civil infrastructure assets necessary to conduct military operations. In order for the Army to conduct full spectrum operations, this infrastructure must be protected. In conjunction with civil law enforcement, Army forces may protect these assets and temporarily restore lost capability.

(3) Response to CBRNE incidents. The FRP is the key plan that affects the use of Army forces in CBRNE incidents. The resources required to deal with CBRNE incidents differ from those needed during conventional disasters. Mass casualties may require decontamination and a surge of medical resources (to include health service logistics, such as antidotes, vaccines, and antibiotics). The sudden onset of a large number of casualties may pose public health threats related to food, vectors, water, waste, and mental health. Damage to chemical and industrial plants and secondary hazards such as fires may cause toxic environmental hazards. Mass evacuation may be necessary. The Army possesses capabilities suited to respond to CBRNE incidents. The USAMEDCOM has the capability, through its experienced clinicians, planners, and support staffs to accomplish assessments, triage, medical treatment (for conventional and NBC casualties), hospitalization, and follow-up care, and provide consultation and advice.

c. Support to Civil Law Enforcement. Support to domestic civil law enforcement involves activities related to counterterrorism, counterdrug operations, military assistance to civil disturbances, and general support. Although the AMEDD does not directly participate in these operations, they do provide HSS to those forces participating. Further, veterinary personnel may also be required to support government-owned animals engaged in these operations.

d. Community Assistance. Community assistance is a broad range of activities that provide support and maintain a strong connection between the military and civilian communities. Community assistance activities provide effective means of projecting a positive military image, providing training opportunities, and enhancing the relationship between the Army and American public. They should fulfill community needs that would not otherwise be met. In addition to providing educational/training opportunities for domestic preparedness, programs such as MAST have enabled communities without aeromedical resources to evacuate critically injured civilians from the incident site (automobile accident or job site) by air to the local area hospital.

8-4. Army Medical Department Activities in Domestic Support Operations

a. The AMEDD may have numerous support roles in DSO. Some of the major AMEDD areas of participation are:

(1) In coordination with federal, state, and local health organizations, annually teaches courses in the medical management of NBC casualties.

(2) Currently, there are 43 SMARTs (Appendix I) in ten functional areas that can respond within 12 hours and provide short duration, medical augmentation to federal and defense agencies responding to a disaster, WMD, humanitarian and/or emergency incidents.

(3) Selected MTFs have been trained and equipped to provide limited patient decontamination as a contingency to a CBRNE event.

(4) Each Army MTF develops and supports their installation with emergency medical management plans in coordination with the installation commander.

(5) The USACHPPM in coordination with other federal agencies, such as the US Environmental Protection Agency, develops appropriate products (reports, protocols, and enhanced monitoring) to enhance security of the Army's critical infrastructure and to develop appropriate guidance to counter acts of bioterrorism. Further, the USACHPPM is a reach-back center for medical information on chemical, biological, radiological, and nuclear incidents and is capable of providing specialists in the medical arena, if required.

(6) Army Medical Department resources can assist in conducting vulnerability assessments of drinking water systems.

b. For additional information on AMEDD support to DSO refer to FM 4-02.7 and FM 8-42.

APPENDIX A

CLINICAL POLICY AND GUIDELINES

A-1. Joint Readiness Clinical Advisory Board

a. The JRCAB, formerly designated as the Defense Medical Standardization Board (DMSB), was established by DODI 6430.2.

b. Department of Defense Directive 6000.12 establishes that the JRCAB, a joint DOD activity, will provide policy and standardization guidance relative to the development of DEPMEDS and medical materiel used for the delivery of health care in the MHS. In executing this duty, the JRCAB has developed a DEPMEDS database (task, time, treater files) and clinical guidelines for patient care (patient condition codes [PCs] and clinical pathways [treatment briefs] [paragraph A-15]). It provides standardization for field facilities, MESs and medical materiel sets (MMSs), consumables, and treatment protocols. Further, it provides standardization across the Services for health care needs for modeling and simulations.

c. The PCs and their accompanying treatment briefs are updated on a quarterly basis by the JRCAB. For the most up-to-date information on PCs and specific treatment briefs, refer to the JRCAB website at: <http://www.armymedicine.army.mil/jrcab/d-prod.htm>.

A-2. Assumptions

This paragraph provides a discussion of the existing assumptions used by the JRCAB in developing the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs. Additionally, it discusses proposed AMEDD changes to these assumptions.

a. *Current Assumptions.*

(1) Essential care versus definitive care. As with the change in focus of JHSS Vision, the subject matter expert (SME) panels developed the treatment briefs under the assumption that only essential care will be provided in the theater versus the previous principle of definitive care being provided. This assumption results in a smaller HSS footprint and increases the reliance on timely aeromedical evacuation (AE) of patients from the theater. In keeping with the focus of only essential care being provided in theater, a theater evacuation policy of 7 days within the CZ and 15 days within EAC is assumed. In any given real-time scenario, the theater evacuation policy is established by the SECDEF with the advice of the JCS and may differ given the specific scenario (refer to paragraph 5-4).

(2) Stabilized versus stable patient. With the shift in the paradigm from definitive care to essential care, the patient condition status required for medical evacuation also shifts from the stable patient to the stabilized patient. This allows the patient to be more rapidly evacuated with the provision of en route medical care than before.

- Stabilized patient: (1) Patient whose condition may require emergency interventions within the next 24 hours. The patient's condition is characterized by a minimum of a secured airway, control or absence of hemorrhage, treated shock, and immobilized fractures. Stabilization is a necessary precondition for further evacuation. (2) A patient whose airway is secured, hemorrhage is controlled, is treated for shock, and fractures are immobilized.

- Stable patient: (1) A patient whose condition is not predicted to change within the next 24-hour period. (2) A patient for whom no in-flight medical intervention is expected but the potential for medical intervention exists.

(3) Core capabilities. Although differences exist in each Services health care capabilities and at what level they become available, the panels developed the treatment briefs based on core capabilities. For frame of reference, the requirements for first responder equates with Level I care and the trauma specialist is the first medically-trained individual the soldier encounters. The forward resuscitative surgery/ care is equivalent to Level II care, but is best defined as the first place that an ill or injured soldier could be held overnight in a medical environment and where forward resuscitative surgery (lifesaving) would take place, if the Level II facility is augmented with an FST. The theater hospital is equivalent to Level III (and sometimes Level IV), but is the first place that full hospital services would be available in theater from which patients would enter the theater AE system. The primary mission of each level is to preserve life, limb, and sight and to stabilize the nonreturn-to-duty patient for evacuation to the next level of care. Those patients who can RTD are treated and promptly returned to duty as far forward as possible.

(4) Minimum capabilities. The treatment briefs do not limit a Service from providing more advanced care forward, but rather they establish a baseline for the minimum care feasible on the battlefield and as envisioned in the JHSS Vision.

(5) Mobility. Units forward of the theater hospital must be mobile and able to carry their own supplies. Mobility considerations place limits on the types of equipment and procedures which can be accomplished far forward. These can include sterilization, refrigeration, laboratory, and radiology technologies. These constraints were considered in planning for blood, some pharmaceuticals, x-rays, and the like. Some forward units may have an increased capability in these areas above the minimum required.

(6) Expected time between levels (from when a patient is ready for evacuation to when they arrive at the next level).

(a) Level IA (trauma specialist) to Level IB (BAS) by ground ambulance will take from as little as 5 minutes to as much as 45 minutes. If an air ambulance at Level IA picks up patients, it will overfly Level IB (BAS) directly to Level II and the FST (Level 2.5). The expected time is between 15 and 70 minutes.

(b) Level IB (BAS) to Level II/2.5 by ground ambulance will take between 10 minutes and 100 minutes. By air ambulance the expected time is between 10 minutes and 45 minutes.

(c) Level II/2.5 to Level III by ground will take between 50 minutes and 9 hours (8 hours in NATO and ABCA assumptions). By air ambulance the expected time is between 50 minutes and 2.5 hours.

(d) Intratheater evacuation from Level III to Level IV may take up to 12 to 24 hours for the bed-to-bed move.

(e) Intertheater evacuation from Level III or IV may take up to 24 to 48 hours for the bed-to-bed move.

(7) Aeromedical evacuation resources. Sufficient aircraft and en route care teams will be available within 48 hours in an immature theater to evacuate stabilized patients from either Levels II, III, or IV to out of theater. Success in future conflicts will be even more dependent upon support from other Services, with joint operations being the norm. Health service support forces will establish sister-Service liaisons and test communications before they are needed. This will be accomplished at all levels of medical care.

(8) Mass casualty. In a mature theater, during maximum estimated casualty flows, there may not be sufficient en route care teams available within 24 hours to evacuate all projected stabilized patients from Level III. A Level IV capability or an increase in Level III holding will be required to support the theater commander's major theater war (MTW) plan and specialty augmentation teams may be required in both immature and mature theaters.

(9) Clinical decision criteria. There are different clinical decision criteria for (1) prehospital evacuation, (2) interhospital evacuations for required increase in care capability, and (3) elective interhospital evacuations.

(10) Location. Levels III or IV may be deployed in theater, may be out of theater, or there may not be a Level III or Level IV deployed. Level IV may be a fixed facility, such as Landstuhl Regional Medical Center (RMC) in Germany.

(11) Treatment Briefs. Treatment briefs will define the postoperative period for stabilization required to survive evacuation to each subsequent point of care, as well as en route care personnel, equipment, and transport times. In an ideal trauma system, equipment and appropriately capable personnel will be placed where they are needed in time, regardless of distance.

(12) Population at risk. The population at risk must be identified. United States service members located in or near the theater would be cared for by theater HSS assets. However, in virtually all situations, local nationals seek care and an eligibility for care determination must be made. Enemy prisoners of war, detained and retained personnel, allied and coalition partners, US government employees (DOD and interagency), and contractors on the battlefield may be provided care depending upon appropriate authorization (such as, memorandum of understanding or agreement, US and international law, and US policies and regulations). The treatment of local nationals and/or authorized dependents may include the requirement to provide pediatric, obstetric, or geriatric care.

b. Proposed Assumptions.

(1) Within the primary mission and field operational constraints (METT-TC), every soldier will be provided the best possible care. Given the primary HSS mission, optimal care is rendered within an environment which may delay immediate access to the patient, inhibit immediate evacuation, result in extended evacuations to appropriate facilities, and may be overwhelmed at particular parts in the system. This system resembles rural trauma care in the US in that trauma usually occurs at a distance from definitive care capability; however, forces deployed for combat expect far higher casualty densities.

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(2) Evacuation is the means to clear the battlefield and to get casualties to treatment capabilities that are needed for recovery and/or survival. Evacuation of less-than-stable casualties may be accomplished safely and help decrease the treatment capability required in theater.

(3) Evacuating patients to a higher level of care necessary for saving life, limb, or eyesight may require URGENT (URGENT-SURG) evacuation of stabilized and unstable patients. This includes the requirement to move a patient from a Level III hospital to either a Level IV with specialty augmentation teams or possibly another Level III hospital that has specialty augmentation teams (such as neurosurgery, ophthalmology, and head and neck surgery). Levels III and IV hospitals may be augmented with specialty augmentation teams in either a mature or immature theater (potentially making them the equivalent of a American College of Surgeons Committee on Trauma Surgery [ACOS COTS] Trauma Level II facility).

(4) Patients undergoing surgery at a FST, who are doctrinally capable of being held for up to 6 hours, should be held longer if the tactical situation permits. Patients evacuated by Army rotary-wing aircraft from FSTs to Level III (or IV) within 6 hours of surgery will be evacuated with personnel capable of providing care, to include airway and ventilation management.

(5) The requirement to transport a patient on medical lift (ground, air, or sea) is initiated by the originating attending medical officer, who is responsible for assessing the stability of the patient and the urgency of evacuation in light of the current theater evacuation policy. In conjunction with the theater medical regulating authority, the decision is made of who, when, how, and where patients will be evacuated.

(6) A stabilized patient is one who, in the best clinical judgment of the originating physician, can withstand a bed-to-bed evacuation of 12- to 24-hours duration. Patients will be stabilized within the limitations of the originating medical facility's (OMF) capability. It is understood that patients moved from Level I or Level II to Level III may not be clinically stable due to the patient's condition and the limited medical resources and time available. Prior to moving patients, an airway must be ensured, fractures splinted, hemorrhage controlled, and shock treated. Patients being moved from Level III to Level IV should be stable enough to tolerate a 12 hour bed-to-bed move. Patients being moved from Level IV to CONUS should be stable enough to tolerate a 24 hour bed-to-bed move.

(7) Unless constrained by operational considerations, the attending physician at the originating MTF will determine when a patient is sufficiently stable to be evacuated. After the attending physician determines that the patient can be considered for evacuation, USAF physicians will make the final determination of whether a patient may be evacuated by AE lift.

(8) Postoperative length of stay will be kept to a minimum consistent with good outcome and the requirement for bed space for anticipated incoming patients.

(9) Only in the event that the USAF is unable to provide their function for care in the air, Army medical personnel will be prepared to augment or do this mission of accompanying unstable or stabilized patients to provide en route medical care in the USAF AE system. The USAF has primary responsibility to provide en route care personnel on other than lifts of opportunity.

(10) The AMEDD will establish policies, guidelines, and assumptions for determining when and who will request movement. The guidelines will identify what type of en route care to provide, if required.

(a) Patients evacuated while on a ventilator will be accompanied by medical personnel trained in ventilator management.

(b) Patients will receive the same level of care en route that they required in the OMF. Thus an intensive care unit (ICU) patient will receive ICU care, unless clearly ready for transfer from the ICU to a lower level of care.

(c) Patients with a high likelihood of requiring care beyond that available en route will not be evacuated if that care is available at the patient's current location, within the limits imposed by the tactical situation.

(11) Joint Pub 4-02.2 indicates that "...psychiatric or terminal cases with a very short life expectancy are therefore *not* considered URGENT (USAF) for evacuation...".

(12) Casualties will be triaged in accordance with accepted standards outlined in the latest edition of the NATO *Emergency War Surgery Handbook*.

(13) The AMEDD will adopt ACOS COTS concepts regarding documentation and collection of data leading to a trauma registry for military patients.

A-3. Deployable Medical Systems and Logistical Considerations

a. Department of Defense Instructions 6430.2, dated 21 June 1984, provided the original DOD policy on the development of DEPMEDS. In part it stated "In order to ensure maximum standardization, increase efficiency, and minimize costs, DOD components shall acquire only those field DEPMEDS approved by the Assistant Secretary of Defense (Health Affairs) (ASD[HA])". The design of the components of DEPMEDS must ensure that the facility will be—

- Capable of providing current quality care.
- Affordable, maintainable, and relocatable.
- Constructed in a modular format for ease of incorporation of a variety of Service-specific configurations.
- Useable by all four Services.
- Capable of being strategically airlifted.

b. The initial MMS developed for use with DEPMEDS facilities were in response to the threat environment focusing on Soviet threat in Europe and around the world. As the threat has changed to

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emphasize less intense conflicts and humanitarian assistance and disaster relief, the Services are developing smaller, lighter deployable systems and augmentation. During Desert Shield/Desert Storm, the concept of a SIMLM was introduced. The Service designated as the SIMLM provides medical logistical support to all Services participating in the operation/AO. Therefore, it became paramount that medical materiel be standardized across the Services which would result in limiting the number of items which needed to be available in the logistics supply/resupply chain. (Refer to Joint Pub 4-02.1 and FM 4-02.1 for additional information on the SIMLM.)

(1) The basic modules of MMSs consist of the equipment, durables, and high use consumables required to support early operational capabilities.

- Medical materiel sets are divided into two components: one including equipment and long shelf-life durables and a second detailing related dated and deteriorative (D&D) items and short shelf-life durables.

- While D&D and short shelf-life durables appear as components of an MMS, these items are held either in the pharmacy, OR, central material supply (CMS), or resupply MMS, and are pushed to or drawn by the MTF departments after the facility has been established.

- Medical materiel sets normally are not built or stored with D&D and short shelf-life items included to avoid loss due to expiration.

(2) The quantities of supplies and equipment contained in MMS are based on patient load data, a 30-day combined scenario, a 7-day (CZ) and a 15-day (EAC) evacuation policy, and a 7/15 day Level III to Level IV bed stay alternative.

(3) The Services use basic MMSs plus select augmentation MMSs to design their MTFs based upon general subjective guidelines including a 2-table OR, a 12-bed ICU, and 20-bed wards.

(4) Resupply MMSs are built based on Service-specific MTFs and workload projections.

(5) Augmentation and special augmentation modules provide increased or enhanced capability by supplementing a basic module with specialty items of equipment, durables, or consumable supplies. Specialty augmentation sets are developed using the following guidelines:

- Use a foundation set to treat a select number of patients.
- Resupply to a select number of patients not tied to days of supply (DOS).
- Requirement for capability increases as the theater evacuation policy lengthens.
- Services provide any supplemental manpower requirements.

(6) Resupply modules provide adequate materiel to replenish patient driven consumables and durable supplies which have been consumed in use with basic and augmentation modules. Resupply modules

are tailored to a specific Service's projected patient workload data and required DOS. For Army resupply sets the DOS is 7 days or more.

c. The D-Day Significant Items List is a comprehensive list of medical and dental consumable items essential to medical forces operating in the field. This list is designed to encompass those supplies available to the military Services from day 1 through day 60 of any conflict for Levels I through IV. The purpose of the listing is to—

- Identify those medical and dental items that are essential for accomplishing the wartime medical missions of the Services at all levels of care. These items would then be available through the SIMLM.
- Alert the medical and dental materiel manufacturing industry to our war surge and sustainment requirements.
- Act as an adjunct to the DEPMEDS database in aiding Service management and development of medical sets, allowance lists, and equipment tables.
- Identify alternate and substitute medical items to satisfy wartime and contingency requirements.
- Encourage the use of D-Day listed items in peacetime medical practice to familiarize care givers with what they will use in wartime.

d. In the requirements determination process for DEPMEDS MMS modules there are two categories: patient-driven items and functionally-driven items.

- Patient-driven items are those medical material items consumed during direct patient care (such as pharmaceuticals and bandages). These items are tied into the DEPMEDS database to specific PCs (paragraph A-13), treatment procedures, and material quantities identified by SMEs.
- Functionally-driven (bulk) items are those major equipment, durables, and selected consumables with levels established by panels of SMEs for each DEPMEDS module.

A-4. Patient Estimates

a. Health service support planners must consider numerous factors when planning for an operation. The HSS planner must determine the medical workload based upon the casualty estimate devised by the S1/G1. In addition, he must consider time and distance factors, distribution of patients on the battlefield and areas of patient density, scenario specific constraints/limitations, and many other factors. An in-depth discussion of medical planning factors is contained in FM 8-42 and FM 8-55.

(1) For standardization purposes, the two simultaneous MTW casualty estimation process from the Total Army Analysis (TAA) process is used in determining the quantities of items placed in basic

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and augmentation sets for those frequently used consumables that are needed for early operational capability. The resupply sets are developed using Service-unique patient streams.

(2) In order to develop, analyze, and refine patient workload, a careful examination of major groupings and subgroupings of patients types must be accomplished.

b. The categories of patient types used to refine patient workload data are: wounded in action (WIA), COSC casualties, disease (DIS), and nonbattle injuries (NBI). The actual PC code numbers and a description of medical conditions which comprise each group are contained in the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs located at the JRCAB website.

c. The patient estimates used to drive the quantity of consumables placed in DEPMEDS are at some variance with historical precedence. The major difference is the relative proportions of WIA versus DIS and NBI. In previous wars, disease admissions have exceeded WIA admissions. Current rates may be explained by the time in the war that the casualty estimate is taken. The three highest periods of WIA casualty generation are time periods 6 through 8 (D + 60 through D + 89). Disease rates are lower during this portion of the war, and are also lower for NATO than other theaters. This reverse WIA/DIS/NBI ratio is acceptable because of the lethality of the modern battlefield, and because the resources needed to provide care for diseases is significantly less than for injuries. It is recognized that as the war proceeds the rates of disease will increase and the number of wounded will be proportionally less.

A-5. Changes to Medical Materiel Sets

a. All new and current DEPMEDS sets and subsequent substantive changes to sets are required to be reviewed and approved by the ASD(HA) prior to acquisition by the military Services. The Director of the JRCAB is authorized to approve maintenance, substitution, and minor changes.

- Substantive—change or addition of a major component of an MMS or addition of a new set which enhances mission capability with consideration given to cost, weight, and cube requirements.

- Maintenance—change to correct administrative error in national stock number (NSN), nomenclature, weight, cost, or similar changes.

- Substitution—change to replace a major or minor component of an MMS with a generically equivalent item with consideration given to cost, weight, and cube requirements.

- Minor—change to delete or add a minor end item or quantity of a component to an MMS.

b. For an in-depth discussion the procedures (to include staffing memorandum for submitting recommended changes to MMS) refer to the JRCAB website.

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A-6. Treatment Guidelines

a. The DEPMEDS treatment guidelines provide assistance, clarification, standards, and expectations of care to providers. They are not expected to be concrete directives nor rigid prescriptions. Patient care must be individualized for each patient and for each medical condition. Within the MHS, a patient may be treated at MTFs managed by different Services, the DEPMEDS treatment guidelines therefore facilitate continuity of care.

b. Current planning incorporates a shortened theater evacuation policy. If patients cannot be returned to duty within the established theater evacuation policy, they are evacuated to the next level of care consistent with their medical status (stable, stabilized, or nontransportable) as soon as possible. The theater evacuation policy currently used for planning is, if from a—

- Level II unit, the patient is not able to RTD within 72 hours.
- Level III unit, the patient is not expected to RTD within 7 days.
- Level IV unit, the patient is not expected to RTD in 15 days.

A-7. Clinical Guidelines

a. *Policy.* The clinical policy for DEPMEDS supports essential care in theater.

- *Appropriate health care* is considered to be the provision of health service logistics support which permits the health care provider to render medical care and make necessary decisions. Consumable supplies required for treatment must be available in a timely manner. Field medical equipment must be transportable, and be available in sufficient quantity with limitations imposed by the combat environment.

- *Adequate health care* is sufficient to provide the lowest possible mortality and morbidity rates for WIA and NBI casualties in the theater forces.

(1) Initial resuscitation should be prompt and at the point of injury or as far forward as tactically feasible.

(2) Wounded, ill, or injured soldiers should be treated and returned to duty at the lowest (most forward) level of care possible.

(3) Those soldiers WIA or suffering from NBIs will be treated and evacuated as expeditiously as possible to the level of care required for initial wound therapy. Initial wound surgery will consist of those procedures necessary to stabilize neurological, vascular, bone, and joint wounds and injuries. Initial wound surgery for the less severe injuries may permit RTD within the stated theater evacuation policy. If not capable of RTD within the evacuation policy, patients should be evacuated to the next level of care.

(4) A mass casualty event occurs when numerous casualties are produced in a relatively short period of time and the numbers exceed the available HSS assets to provide individualized treatment. In order to maximize the expenditure of scarce resources and to provide the greatest good to the greatest number, triage (sorting) of casualties is required. Triage requires clinical judgment to evaluate and categorize casualties for medical treatment and evacuation. Field Manual 4-02.6 and the NATO *Emergency War Surgery Handbook* (STANAG 2068) provide an in-depth discussion of mass casualty situations, triage categories, and the establishment of a mass casualty station. When a disparity no longer exists between the number of casualties and the available HSS resources, routine treatment emphasis will govern once again.

(5) Due to weight and cube considerations, wherever practical, reusable durable items are preferable to disposable equipment or consumable supplies, when there is a means to sterilize, clean, and/or launder them.

b. Nursing Practice Guidelines. The goal of nursing is to provide safe and efficient nursing care in a deployed setting. The nursing guidelines are designed to provide care at a safe level or maintain life, limb, or function. Nursing care is comprised of direct and indirect activities.

- Direct nursing care includes those nursing actions that occur to and for the patient in the OR setting, at the bedside, or in the presence of patients and are observable.

- Indirect nursing care includes those activities that are essential for patient care but are not done at the patient's bedside.

- In the TO, indirect nursing care is greater than in CONUS due to the austere environment.

- Indirect nursing care includes activities such as obtaining medications; collecting equipment for procedures; disposing of medical waste; managing soiled linens; resupplying OR or ward stock; transporting patients; transporting specimens to the laboratory; obtaining x-rays and blood products; performing operator maintenance on medical equipment, maintaining OR sanitation; and documenting medical care and patient status in pre- and postoperative areas, ORs, and wards.

(1) Nursing practice incorporates the activities of data collection, assessment, implementation of a plan of care, and evaluation of patient care outcomes. The nurse must continually adjust priorities to meet the dynamic requirements of patient care, ancillary support coordination, administrative tasks, and staff management. The clinical, cognitive, and managerial skills of the nurse are essential to effectively function under vigorous demands of a wartime, stability operations, and/or support operations scenario. This environment includes limited numbers of staff, austere facilities, equipment with limited capabilities, and a higher frequency of acute care requirements.

(2) Food service personnel will deliver food to the wards and nursing personnel will deliver food trays to patients.

(3) Whenever possible, nonnursing personnel will assist in transporting stable patients to and from the x-ray, physical therapy (PT), and dining facilities. A nonnursing pool could include ambulatory, self-care patients, and administrative and supply personnel.

(4) Patient holding areas within a hospital are referred to as *wards*. There are a number of different types of ward within a hospital. These wards are:

- Intensive care unit. This ward manages surgical and medical patients whose physiological status is so disrupted that they require immediate and continuous medical and/or nursing care. Noninvasive physiological monitoring and life support systems are standard items used in this setting. Invasive augmentation sets may also be available.
- Intermediate care ward (ICW). This ward manages surgical and medical patients whose physiological and psychological status is such that they require observation for the presence of real or potential life-threatening disease or injury. The acuity of care may range from those requiring constant observation to those patients able to ambulate and assume beginning responsibility for their care. The level of care and acuity of these patients may fluctuate depending upon the intensity of the conflict. Although not routinely required, ICW patients may need monitoring devices and ventilator support.
- Minimal care ward (MCW). This ward manages surgical and medical patients who are partially self-sufficient and usually ambulatory. Some patients require limited therapeutic and diagnostic services and are in the final stages of recovery. Complexity of care includes administering oral medications and treatments which cannot be done by patients and may also include providing instruction in self-care and posthospitalization health maintenance. This treatment may include therapy and reconditioning of RTD patients.

(5) Standards and responsibilities for the following areas are contained in the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs and are available at the JRCAB website (paragraph A-1c):

- Intravenous fluid standards and procedures.
- Administration of medication.
- Intake and output documentation.
- Foley catheters.
- Admission procedures.
- Patient assessment and evaluation.
- Documentation requirements.
- Skeletal support systems.
- Patient hygiene.
- Nasogastric tubes.

(6) Central materiel supply provides support to hospital activities 24 hours a day and 7 days a week. The CMS is expected to be in an operational mode early in the establishment of a DEPMEDS hospital, in accordance with Service-specific plans and operations. Sterile items, trays, and linen packs should be available as soon as possible.

(7) Nursing care in the OR dictates staffing requirements, administration and management of the CMS, administration of medications, patient transport, preoperative assessment, documentation of nursing care, sponge, sharps, and instrument counts, conscious sedations, collection of specimens, and the positioning of the patient.

(8) Safety procedures in the OR encompass the use of lasers, pneumatic tourniquets, fire safety, hazardous material (HAZMAT), electrical failures, gas cylinder handling, storage, and disposal, use of electrosurgical devices, and infection control measures.

(9) Personal protective equipment is available for all OR personnel and its use is required to prevent contamination by infected blood/body fluids. Personal protective equipment includes gloves, face shields, goggles, shoe covers, gowns, masks, and head covers, as appropriate.

(10) Only medications will be kept in the medicine refrigerator. Temperature checks will be performed in accordance with the pharmacy SOP and the refrigerator will be cleaned weekly with a detergent.

(11) Traffic patterns will be established that preclude the crossing of clean and sterile supplies and equipment over paths used to move contaminated supplies and equipment and waste disposal.

(12) To ensure the quality of air within the OR, filters should be changed in accordance with the OR SOP.

c. *Patient Complications.* Unfortunately, some patients' medical conditions will deteriorate or complications will set in. These adverse events may necessitate a return to intensive care, additional treatment, and the expenditure of additional medical supplies. A general, nonspecific incidence of complication rate is applied to those PCs felt to be most liable for complications and is reflected in the applicable guidelines and treatment briefs. Patients with complication of life-, limb-, or vision-threatening nature should be stabilized and evacuated as expeditiously as possible.

A-8. Support Guidelines

a. *Patient Administration.* The patient administration (PAD) division in a DEPMEDS hospital is responsible for most of the administrative aspects of patient care. These responsibilities encompass: admission and disposition (A&D) processing; scheduling patient evacuation; collecting, safeguarding, and accounting for patient's funds and valuables; custodianship of inpatient and outpatient treatment records, to include timely redeployment of medical records; maintenance of medical records and files; collecting and reporting of medical statistical data; management of casualty (reporting) and decedent affairs; initiation of line of duty investigations; and submission of special reports and other patient related activities (such as

very seriously ill [VSI] and seriously ill [SI] listings). The PAD coordinates externally with the higher headquarters medical regulating office (MRO), the TPMRC, and/or the supporting mobile aeromedical staging facility (MASF)/aeromedical staging squadron (ASTS), as appropriate for all AE; with the personnel/casualty affairs officers of patient's units (to include VSI, SI, stable condition, or deceased information); with mortuary affairs (MA) for the prompt removal of remains (the DEPMEDS hospital does not have a morgue); with supporting personnel unit to arrange transportation for RTD patients; and with supporting personnel and supply units to reequip soldiers who RTD at this level (DEPMEDS hospitals do not stock additional uniforms and equipment for RTD soldiers). Upon admission of a patient, the PAD must collect, store, and notify the patient's parent unit of weapons, ammunition, and explosives evacuated with the patient. Further, the PAD ensures that baggage belonging to evacuated patients is within the AE weight guidelines and for making appropriate disposition of excess baggage.

b. Infection Control. Infection control activities within an MTF are critical to the patient care mission. Infection control considerations include:

- Handwashing which is essential before and after each patient contact.
- Standard precautions and aseptic techniques are used when the patient's condition requires invasive procedures.
- Category specific isolations procedures allow for optimal isolation when indicated (FM 4-02.33), especially in a field environment where microbiologic diagnostic capabilities may be limited. (A listing of specific diseases and length of isolation required is contained in the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs located on the JRCAB website [paragraph A-1c].)
- Intravascular access therapy accomplished at Level II will be considered as not accomplished under aseptic conditions.
- All open fluid containers will be changed and/or discarded after 24 hours, such as IV and irrigation fluids.
- All laboratory specimens will be handled using standard precautions, and should be considered to harbor pathogens.
- Linen and trash must be removed from patient care areas (PCAs) at a minimum of every 12 hours.
- Reusable equipment will be cleaned and disinfected between patients. Disposable equipment should not be reused.

c. Waste Disposal. Medical treatment facilities create a significant amount of waste. There are five categories of waste. These categories are: general waste (including solid waste), hazardous waste, medical waste, human waste, and wastewater. All military units generate general and hazardous waste. Medical waste is generated by medical personnel and units during the performance of the health care

delivery mission. There are two types of medical waste: nonregulated and regulated. Nonregulated medical waste consists of solid materials generated from the direct result of patient diagnosis, treatment, and therapy that requires no further treatment and can be disposed of as general waste. Regulated medical waste (RMW) is defined as medical or laboratory waste that is potentially capable of causing disease in people and may pose a risk to individuals or public health if not handled or treated properly. All types of waste must be disposed of in accordance with US laws, regulations, and policy guidance. If the unit is located outside of the US, cooperative agreements and HN laws may also affect the proper disposition of waste. For an in-depth discussion of waste disposal refer to FM 4-02.10, FM 4-25.12, and FM 21-10 and the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs which are available at the JRCAB website.

d. Nutritional Care. At Levels I and II there are no resources to provide special diets for patients. Those soldiers who may be held at the Level II MTF for 72 hours must be capable of subsisting on the field rations available. At the Level III hospital (and above), dietitians and medical supplemental rations are available to prepare special diets for hospitalized soldiers; however, nutritionally impaired patients should be considered for expeditious evacuation to facilities with full nutritional support capability. The meal, ready-to-eat (MRE) is not authorized for patient feeding at any level within the theater medical system, except in AE and emergency situations when other rations are not available.

e. Laboratory Services. Laboratory services are available from Level II through Level V. The sophistication of laboratory procedures increases with each level of care. The capabilities of a specific laboratory are based on the MMSs available to the unit. Laboratory capabilities are very limited if only the basic laboratory MMS (D303—Laboratory [General]) and (D304—Laboratory [Liquid Blood Bank]) are available. These modules do not allow for the use of frozen blood products, the culture and susceptibility testing of microorganisms, or anatomic pathology/cytology procedures. Specimens for microbiology and anatomic pathology/cytology procedures can be collected and referred to another hospital or special function laboratory that offers the required procedures. Hospital laboratory capabilities can be significantly enhanced by additional Liquid/Frozen Blood Bank (D404) sets or the addition of the Microbiology (D403) and Anatomic Pathology/Cytology (D436) modules. One other module, Frozen Blood Bank (D405) can also be used to increase capability. For a description of these MMSs refer to the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs which are available at the JRCAB website.

f. Blood Bank. The Armed Services Blood Program Office (ASBPO) was established by DODD 6480.5 to coordinate the respective military departments and unified commands' blood programs to effect standardization of policies, procedures, and equipment. The ASBPO is the organization authorized direct liaison with Federal, civilian, and allied or coalition agencies on all blood related matters.

- Each unified command has a separate integrated system for providing blood and blood products to its various component MTFs. The unified command JBPO serves as the single blood manager.

- Frozen blood products will be pre-positioned in designated unified commands in quantities to support blood requirements for the initial days of an armed conflict. The frozen blood products are shipped to and used in DEPMEDS hospitals and on designated naval vessels. The Food and Drug

Administration (FDA) has licensed frozen RBCs for 10 years storage; however, data has shown that it can be stored up to 21 years and might be used during contingencies.

- The ASBPO directs shipment of liquid and frozen blood products from CONUS to a TO via a designated Armed Services Whole Blood Processing Laboratory (ASWBPL). In theater, blood products are received at a blood transshipment center and shipped to a component blood supply unit and subsequently distributed on a geographical basis to MTFs.

- Although the FDA has approved post-wash storage of deglycerolized RBCs, it may only be stored up to 3 days post-wash. Therefore, in contingencies, if deglycerolized RBCs are used they may only be stored for up to 3 days post wash.

- Certain wartime scenarios require the use of frozen deglycerolized RBCs during the initial phase following the onset of hostilities. In fact, the majority of total RBC requirements will be obtained from deglycerolized RBCs until liquid RBCs can be obtained from CONUS. Thereafter, liquid RBCs will be used. Whenever possible, blood products shipped to the theater will have a minimum of 2 weeks remaining before expiration.

- Generally, 20 percent of all RBCs will be given at Level II, 60 percent at Level III, and 20 percent at Level IV. The normal Rh distribution to 85 percent Rh positive and 15 percent Rh negative is projected.

- The blood planning factors are used by medical planners in calculating the blood product requirements within the TO. They are to be applied only once per patient admitted. They represent cumulative requirements for that patient during hospitalization for that specific episode. The planning factors for blood are—

- Red blood cells—4 units for each WIA and NBI patient admitted in a deployed facility.

- Fresh frozen plasma (FFP)—0.08 units for each hospitalized WIA and NBI patient.

- Frozen platelet concentrate (PLT)—0.04 units for each hospitalized WIA and NBI patient.

- The blood planning factors are programmed into the Medical Planning Module (MPM) and are used by unified medical planners to generate daily product requirements for the theater.

- Except in emergencies, pre-positioned blood products will eliminate blood collection requirements in the TO during armed conflict. The majority of blood products needed in theater will be provided from CONUS. All blood products pre-positioned or provided from CONUS will be fully processed.

- Immediate spin cross-matching of RBCs will be performed at Levels III and IV. It will not be performed at Level II.

- The ABO and Rh group of the patient will be rechecked prior to infusion at Levels III and IV. The ABO and Rh group of RBCs will be checked unless they have been verified by the ASWBPL prior to shipment.

- Antibody screens will not be performed in theater.

- Blood collected in the field under emergency conditions will only be tested for ABO and Rh group. Where theater assets permit, a serum tube will be collected for subsequent infectious disease marker transmission purposes.

- For specific information on blood requirements for each PC and transfusion procedures refer to FM 8-70, Technical Manual (TM) 8-227-3, TM 8-227-11, TM 8-227-12, and the patient treatment briefs available at the JRCAB website (paragraph A-1c).

g. Radiology Services. Radiology support is available at Levels II through V. For acute care at Level II MTFs, the primary care physician and/or PA are responsible for reading and interpreting x-ray films taken at this level. The complexity of procedures and studies is limited at this level due to the austere conditions and equipment limitations. At Levels III and IV hospitals which have an assigned radiologist, the preliminary interpretation of x-ray films taken for acute care may be performed by the requesting provider. However, the radiology department is responsible for the final reading and interpretation of all films taken at the facility. Nuclear medicine and magnetic resonance imaging capabilities are not available within the TO. For guidelines on specific PCs and standards refer to the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs which are available at the JRCAB website (paragraph A-1c).

h. Pharmacy Support. Pharmacy services within a hospital provide support to the PCAs on a 24-hour basis. The pharmacy should be operational in the early establishment of the hospital. Services provided by the pharmacy include: providing general pharmaceutical support (for example: restocking of PCAs on a daily basis, filling valid orders for drugs as received, and operating an issue point where PCA personnel pick up medication and deliver drugs to using units, if appropriate); providing all controlled substances; packaging and dispensing medication for AE and discharge to duty patients and/or other ambulatory patients; providing parenteral admixture services; generating IV quality fluids in the theater; providing parenteral nutritional solutions at Levels III and IV; providing other compounded miscellaneous sterile fluids; providing drug information services; and providing guidance on the selection and procurement of all pharmaceuticals. Unit dose services will not be provided in theater. Other considerations include:

- It is expected that deploying personnel who are taking medication will bring their own supply for the first 90 days. Medications for long-term administration may not be available until the resupply system (line order requisitioning) is established.

- Initial pharmacy stockage is contained in MMS D306. Pharmacists should review the D-Day Significant Item List for alternate drugs for specific drug classes. Within the hospital, the pharmacy service will request resupply from the MTF logistics division.

- When requesting pharmaceuticals, PCA personnel must have a bulk drug order, duplicate copy of the physician's medication order, or the standard prescription form.

- A reasonable quantity of medications will be provided by the pharmacy to the PCAs, as determined by the patient care staff.
- The handling, accountability, and record keeping for controlled substances is required and it must conform to regulatory requirements. All restricted and controlled items must be stored in a lockable container in any DEPMEDS module.

A-9. Medical Guidelines

a. Emergency Medicine.

(1) *General guidelines.* Emergency medicine focuses on the stabilization of life- or limb-threatening diseases, injuries, and wounds. It is the care provided by the trauma specialist, physicians, and PAs in forward areas (Levels I and II) and in CZ and EAC hospitals. Each level has an increasing sophistication of equipment and services provided to ensure the best prognosis, to decrease morbidity and mortality, and to limit long-term disability. When establishing an MTF, regardless of size or location, the emergency medicine area should be operational at the earliest possible moment. Patients presenting with severe traumatic injuries should be administered tetanus toxoid, based upon the individual patient condition. Further, all patients with suspected head and neck injuries should have the head and neck immobilized with the best available product. This may necessitate changing the cervical collar to the universal fitting cervical collar at Level III.

NOTE

The AMEDD is currently reviewing and recommending changes to existing protocols for the use of resuscitative fluids on the battlefield. If a casualty with a traumatic injury is coherent, alert, and oriented to place and time, and has a radial pulse, and all obvious bleeding has been stopped, resuscitative fluids should not be immediately administered. The casualty's wounds are treated and he is monitored to ensure he does not develop signs of shock.

- **Level I.** The first medical care an injured, ill, or wounded soldier receives is provided at this level. Emergency medical treatment at the point of injury or wounding is provided by the trauma specialist. The patient is then evacuated to the BAS, which is the MTF (established by the treatment platoon of the maneuver unit) where the soldier receives ATM. At this level the soldier is treated and returned to duty or stabilized for further evacuation to the rear.
- **Level II.** Medical treatment at Level II is a continuation of the treatment received at the BAS. As the MTF is established in a more secure location than the BAS, the physicians and PA have additional time in which to enhance stabilization of the patient for further evacuation to the rear. If augmented by a FST, patients requiring far forward resuscitative surgery can receive the required care at this level.

- Levels III and IV. The emergency medicine/treatment area of the CSH is the entry point for patients into the theater hospitalization system (Level III and EAC Level IV). The emergency medicine/treatment area can be used for triage, emergency treatment (ATM), and as a preoperative area. The Army Service Component Command (ASCC) may determine that a separate preoperative area is established in its hospitals based on METT-TC.

(2) *Airway management.* The establishment of patent airway is essential for resuscitation of a traumatized patient. Endotracheal tubes (ETs) will be placed by qualified clinicians at whatever treatment level where the capability exists to support the patient's airway management needs. Endotracheal tubes are used for assisted ventilation if required for brief periods of time (up to 7 days). If required for airway management, cricothyroidotomies can be performed; these are normally performed under emergency conditions where restorations of a patient airway is an immediate requirement to sustain life. Aeromedical evacuation does not require a surgical airway; however, one should be considered if the physician determines that the patient requires assisted ventilation for more than 7 days; if there is a significant risk the ET could be displaced during transport; and when the upper airway injuries are less than 3 days old.

(3) *Control of hemorrhage and bleeding.* Extremity hemorrhage should be controlled by direct pressure. Tourniquets may be of value, but the use of clamps directly into the wound should not be employed.

(4) *Support of circulation (resuscitation fluids).* The predominant cause of shock in trauma patients is hypovolemia. The three most severe classes of hemorrhage (Classes II, III, and IV) require astute clinical attention and action. Management of these patients require hemorrhage control and fluid replacement with appropriate monitoring.

- The primary agents for resuscitation are lactated Ringer's (LR) solution and blood. Available blood products in various operational theaters are liquid packed (deglycerolized) RBCs, packed RBCs, FFP, and PLTs.

- Colloid solutions will generally not be needed in most cases of hypovolemic shock. For DEPMEDS hospitals there is albumin/protein products (25 percent and 5 percent) and a synthetic colloid preparation (hetastarch) available for patients with Class III and IV hemorrhage, as deemed appropriate by the attending physician.

- Hypovolemic shock is not treated by vasopressors, steroids, or sodium bicarbonate.

- Two large bore IVs are established and the infusion of LR is started.

- When possible, patients should have a systolic blood pressure of greater than 100 millimeters (mm) mercury (Hg) and urine output of 30 cubic centimeters (cc)/hour before going to surgery. This, however, is a matter for clinical decision by the health care provider.

- All crystalloid fluids for resuscitation are contained in the EMT MMS. Those fluids used in the OR are for the maintenance of anesthesia only.

b. *Resuscitative Fluids.* For an in-depth discussion of types of resuscitative fluids, quantities required, administration of fluids, and coagulopathy refer to DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs located at the JRCAB website.

c. *Infectious Diseases.* Incidence of infectious diseases must be reported in accordance with the requirements of FM 4-02.33. Infectious disease consultation will be available within the theater and will be coordinated through the supporting PVNTMED personnel/units. All unexplained febrile patients should be evacuated. If required, the theater evacuation policy may be amended to meet the specific requirements imposed by an outbreak of a specific infectious disease. Health hazard assessment and medical surveillance activities are mandated by DODD 6490.2, DODI 6490.3, and AR 40-66. All infectious disease occurrences must be documented in the individual soldier's health record.

d. *Medical Aspects of the Biological Threat.* Many bacteria, fungi, viruses, rickettsial agents, and toxins have the potential of being used as BW agents. Despite the very different characteristics of these organisms, biological agents used as weapons share some of the same common characteristics. They can be dispersed in aerosols of particle size 1 to 5 microns which may remain suspended (in certain weather conditions) for long periods and if inhaled will penetrate into distal bronchioles and terminal alveoli of victims. They may be delivered by simple technology, including industrial sprayers with nozzles modified to generate the smaller particle size. The aerosol could be delivered from a line source such as an airplane, or boat traveling upwind of the intended target, or from a point source such as a stationary sprayer or a missile dispensing agent containing bomb lets in an area upwind of the target. Other possible routes of exposure for BW agents include oral, by intentional contamination of food and water, and percutaneous. In general, these routes of exposure are less important than the respiratory route. For an in-depth discussion on the protection, prevention, and treatment of BW casualties refer to FM 8-284. For an in-depth discussion of the operational aspects, to include patient decontamination, refer to FM 4-02.7.

e. *Medical Aspects of the Chemical Threat.* Chemical agents may exist as solids, liquids, or gases, depending on temperature and pressure. Except for riot-control agents (which are solids at usually encountered temperatures and pressures), CW agents in munitions are liquids. Following detonation of the munitions container, the agent is primarily dispersed as a liquid or as an aerosol, defined as a collection of very small solid particles or liquid droplets suspended in a gas. The tendency for a CW agent to evaporate depends not only on its chemical composition and on the temperature and air pressure, but also on such variables as wind velocity and the nature of the underlying surface with which the agent is in contact. Volatility is inversely related to persistence, because the more volatile a substance is, the more quickly it evaporates and the less it tends to stay or persist as a liquid and to contaminate terrain and materiel. For an in-depth discussion on the protection, prevention, and treatment of CW casualties refer to FM 8-285. For an in-depth discussion of the operational aspects, to include patient decontamination, refer to FM 4-02.7.

f. *Critical Care.* Critical care management (CCM) encompasses the acute medical/surgical care of the critically-ill patient and is predicated on accurate pre-CCM triage decisions that select patients for further support. Critical care management includes care for acute cardiorespiratory collapse, pre- and postoperative care of trauma victims, treatment of disorders of oxygenation and ventilation for circulatory difficulties (including dysrhythmias and cardiovascular trauma). The process of CCM includes intensive monitoring with appropriate equipment required to identify life support deficiencies. The provision of CCM also implies expertise in airway management, skill in hemodynamic monitoring and supportive

services including fluid administration, cardiogenic and vasoactive medication administration, and nutritional support. Evacuation of casualties requiring prolonged CCM must be available and evacuation services capable of transporting patients with mechanical ventilator (MV) and invasive monitoring should be available within the TO. Specific guidelines for acute respiratory failure (ARF), shock, and sepsis are contained in the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs located at the JRCAB website (paragraph A-1c).

g. Respiratory Care. Respiratory care in a DEPMEDS-equipped MTF focuses on MV support, supplementation of oxygen, administration of aerosolized medicines, and general care of the patient with ventilatory compromise. Respiratory care is an integral part of casualty care from the emergency medicine/triage area through the postoperative ICU and on to the ICW. Its major impact and emphasis is on the intubated, mechanically ventilated patient. For specific discussions on oxygen administration, airway management, MV, aerosolized medications, respiratory and nursing care, refer to the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs located at the JRCAB website (paragraph A-1c).

h. Optometry. The increasing incidence of eye injuries in war and the incapacitating nature of such injuries give high priority to vision care. In addition, the loss of glasses, contact lens, or gas mask inserts can, at the least degrade performance and at worst, make the individual combat ineffective. By providing the appropriate eye care support, the casualty can quickly RTD without a visual impairment. An optometrist can effectively manage most anterior segment eye injuries and diseases, freeing the ophthalmologist for surgical repair of eye and adnexal injuries. Optometrists also effectively triage more severe ocular injuries and ensure prompt treatment of such conditions. Optometrists provide essential support to the operational aviation community for the aviation contact lens program. Contact lenses should not be used in theater unless medically or operationally indicated for specific mission purposes. Replacement spectacles and protective mask inserts requiring standard single vision lenses may be fabricated at optical support units in theater, afloat, or in fixed facilities. Bifocal lenses and nonstandard single vision lenses may be requested from the supporting CONUS full service ophthalmic laboratory or from an OCONUS ophthalmic laboratory which has a lens surfacing capability.

A-10. Surgical Guidelines

a. At Level II, the medical company augmented with an FST is the location where surgical intervention can first occur to render a nontransportable patient sufficiently stabilized to withstand evacuation to an Level III hospital. The FST is limited in the number of surgical procedures it can perform.

b. North Atlantic Treaty Organization STANAG 2068 necessitated the publication of the *NATO Emergency War Surgery Handbook*. This handbook in concert with the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs provide the guidelines required for conducting surgery in a field environment.

c. Specific guidance on the following areas is provided in the DEPMEDS Administrative Procedures, Clinical and Support Guidelines: wound management and debridement; antimicrobial prophylaxis; anesthesia; neurosurgery; ophthalmology; oromaxillofacial/otolaryngology surgery; thoracic surgery; vascular surgery; abdominal surgery; urological surgery; obstetrics/gynecology; and orthopedics.

d. Operational concerns include but are not limited to—

- Health service logistics (to include blood and blood products) must be comprehensively planned for and supply levels monitored. A shortage or lack of specific medical supplies and/or equipment may dictate that standard protocols are amended. For example, for wound debridement, if there are not sufficient quantities of sterile irrigation fluids, potable water can be used as a first stage irrigant. The final liter of irrigant should be a sterile saline containing antibiotics.

- Once a patient has undergone surgery, he should not be moved until he has recovered from the anesthetic and his vital signs have been stabilized. Should the hospital (and/or FST) have to move during this period, a medical holding element with sufficient medical staff, equipment, and supplies should remain at the location with the patients until they are sufficiently stabilized for transport and medical evacuation platforms are available to effect the move.

NOTE

In accordance with the provisions of the Geneva Conventions (paragraph 4-4a[4]), if a patient must be abandoned, we have a moral obligation to leave behind sufficient medical supplies, equipment, and personnel to care for the patient.

- Patients with severe neurological injuries should be rapidly resuscitated and evacuated to a MTF capable of providing the required care. In general, patients with severe head injuries, as defined by the Glasgow Coma Score (GCS) of less than or equal to 5, will have a lower priority for evacuation in a triage scenario (mass casualty situation). The presence of certain specific traumatic intracranial processes (such as acute epidural hematoma) may significantly alter this guideline. If neurosurgical evaluation is not available, a GCS higher than 5 should indicate PRIORITY evacuation. A lower GCS may suggest a lower priority for evacuation, or in the worst case scenario, EXPECTANT management.

- Due to the unpredictability of prognostication in the acute phase of spinal injuries, all patients with spinal trauma with neural compromise are treated aggressively and given a high priority for evacuation (URGENT and/or PRIORITY [METT-TC and medical condition dependent]).

- Personnel requiring surgery for obstetrical and gynecological reasons should be evacuated from the operational theater as soon as possible. When clinical, operational, or logistical reasons preclude evacuation, the postoperative patient may be evacuated when deemed stable for transport by the attending health care providers.

- Policies for aeromedically evacuating patients with musculoskeletal injuries include—

- All immobilized patients are to be transported on litters to permit elevation of injured extremities. This requirement includes some upper extremities, and essentially all lower extremity and spine injured patients.

FM 4-02

- All circular casts must be bivalved prior to entry into the AE system to permit rapid access to the limb and to allow for swelling at altitude.
- Free hanging traction devices are not allowed on medical evacuation aircraft. Traction may be applied through elastic and spring devices but must fit the litter.
- All casts, splints, devices must be no longer than the size of the litter and its handles.

A-11. Dentistry Guidelines

Although dental health during peacetime/garrison activities is relatively high, many dental problems arise during deployments. Dental patient conditions can produce symptoms that range from a minor distraction to severe debilitating pain and are often aggravated by external factors such as stress, fatigue, poor diet, and temperature extremes. These symptoms have considerable impact on the accomplishment of the military mission. Prompt and timely dental treatment lends itself to the rapid return of soldiers to duty, since severe problems can often be treated relatively quickly with minimal equipment and supplies. The two categories of dental care provided within the TO are emergency dental care and essential dental care. Comprehensive dental care is provided in the CONUS-support base. Preventive dentistry is a part of essential care. For additional information on dental activities refer to paragraph 5-7 of this publication, FM 4-02.19, and the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs located at the JRCAB website (paragraph A-1c).

A-12. Special Topics

a. Burns. The risk of burn injuries is increased in the military, especially during conflicts. The presence of large quantities of fuel for both vehicles and aircraft are lucrative targets for the enemy and the ignition of these flammable liquids (either intentionally or unintentionally) can result in serious injury to personnel. Additionally, the enemy use of weapons, such as flame-throwers and antipersonnel devices can also increase the risk factor for burns.

(1) Burns can be caused by flammable materials (flame and flash burns), chemical agents, and electric sources. In the military, soldiers suffering from severe burns may also have multiple traumatic injuries or inhalation injuries which complicate the care required.

(2) The first concern of treating patients with thermal (flame or flash) burns is to secure the airway, control hemorrhage, and to begin initial resuscitative therapy. Once the patient begins to stabilize (hemodynamic stability), attention is then directed to wound care and care of other traumatic injuries. In instances of chemical burns and burns resulting from white phosphorous, wound care is immediate in order to decontaminate the wound to prevent further injury. Burns caused by electric current have special treatment requirements, as the total body surface area (TBSA) covered by the burn in comparison to the underlying tissue affected is small.

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(3) In a combat setting, METT-TC factors, logistical limitations, and limited availability of health care personnel may necessitate the triage of burn patients. With optimum treatment and appropriate facilities, approximately 50 percent of patients whose burns involve 60 percent to 70 percent of the TBSA may survive. With limited resources, burn care resources should be applied to the group of patients which would benefit the most (20 to 70 percent TBSA burns). This may necessitate that some patients will be managed as EXPECTANT (over 70 percent TBSA burns) while others, with limited burns (less than 20 percent TBSA burns) receive delayed hospital care. Depending upon the availability of resources and the number of burn patients, the upper limits may have to be reduced and should be done in increments of 10 percent.

(4) The burn patient best tolerates movement by either ground or air evacuation resources in the early postburn period; that is after hemodynamic and respiratory stabilization and before the development of septic complications which may make movement particularly hazardous. Optimally, the patient should be evacuated to a definitive care facility (CONUS-support base) within 48 hours following the injury.

(5) For an in-depth discussion of treatment protocols for burn patients, refer to the NATO *Emergency War Surgery Handbook* and the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs.

b. Physical Therapy and Occupational Therapy. Physical therapy and occupational therapy (OT) personnel have complementary backgrounds and training, but are not substitutable for each other. When providing unit level care (physician extender mission) for neuromusculoskeletal problems, PTs provide primary care for complaints involving head and neck, spine and trunk, and the extremities; OTs are limited to primary care of the elbow, wrist, and hand. If both services are available within a facility, they may be collocated. During mass casualty situations, PT personnel may assist in managing DELAYED and MINIMAL patients and/or supplement the orthopedic section. Occupational therapy personnel have skills and training to provide combat operational stress support to patients and staff. These health care providers may or may not be deployed to the theater depending upon METT-TC, medical troop ceilings, and the theater evacuation policy. For an in-depth discussion of treatment guidelines for these specialties refer to the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs.

c. Preventive Medicine and Occupational and Environmental Health. Preventive medicine, to include medical surveillance activities is an essential function in both garrison settings and when units are deployed. For a discussion of PVNTMED services refer to paragraphs 5-6 of this publication, FM 4-02.17, FM 4-25.12, and FM 21-10. For policy guidance concerning these functions within a DEPMEDS hospital setting, refer to the DEPMEDS Administrative Procedures, Clinical and Support Guidelines, and Patient Treatment Briefs and FM 4-02.10.

A-13. Numerical Listing of Patient Condition Codes

a. This paragraph lists the PCs identified in the DEPMEDS clinical database.

b. The following is a list of the PCs for your information. The PCs and their accompanying treatment briefs are updated on a quarterly basis by the JRCAB. For the most up-to-date information on PCs and specific treatment briefs, refer to the JRCAB website provided in paragraph A-1 above.

- 0001 Cerebral Concussion, Closed, with/without Nondepressed Linear Skull Fracture, Severe—Loss of Consciousness from 2 to 12 Hours.
- 0002 Cerebral Concussion, Closed, with/without Nondepressed Linear Skull Fracture, Moderate—Loss of Consciousness less than 2 Hours.
- 0003 Cerebral Contusion, Closed, with/without Nondepressed Linear Skull Fracture, Severe—Loss of Consciousness greater than 24 Hours, with Focal Neurological Deficit.
- 0004 Cerebral Contusion, Closed, with/without Nondepressed Linear Skull Fracture, Moderate—Loss of Consciousness from 12 to 24 Hours, without Focal Neurological Deficit.
- 0005 Cerebral Contusion, Closed, with Intracranial Hematoma, with/without Nondepressed Linear Skull Fracture, Severe—Large Hematoma (Including Epidural Hematoma) with Rapidly Deteriorating Comatose Patient.
- 0006 Cerebral Contusion, Closed, with Nondepressed Linear Skull Fracture, Severe—Loss of Consciousness greater than 24 Hours, with/without Focal Neurological Deficit.
- 0007 Cerebral Contusion, Closed with Depressed Skull Fracture, Severe—with Associated Intracerebral Hematoma and/or Massive Depression.
- 0008 Cerebral Contusion, Closed, with Depressed Skull Fracture, Moderate—No Associated Hematoma or Significant Effect from Depression.
- 0009 Cerebral Contusion with Open Skull Fracture, Severe—with Intracranial Fragments and/or Depressed Skull Fracture; Eyelid and Eyeball Laceration with Retained Intraocular Foreign Body.
- 0010 Cerebral Contusion with Open Skull Fracture, Moderate—without Intracranial Fragments and/or Depressed Skull Fracture.
- 0011 Intracranial Hemorrhage, Spontaneous, Nontraumatic, All Cases.
- 0012 Patient Condition Code Not Assigned.
- 0013 Wound, Scalp, Open without Cerebral Injury or Skull Fracture, Severe—Scalped with Avulsion of Tissue.
- 0014 Wound, Scalp, Open without Cerebral Injury or Skull Fracture, Moderate—Scalp Laceration.
- 0015 Fracture, Facial Bones, Closed, Exclusive of Mandible, Severe—Multiple Fractures.
- 0016 Fracture, Facial Bones, Closed, Exclusive of Mandible, Moderate—Single Fracture.
- 0017 Wound, Face, Jaws, and Neck, Open, Lacerated with Associated Fractures, excluding Spinal Fractures, Severe—with Airway Obstruction.
- 0018 Wound, Face, Jaws, and Neck, Open, Lacerated with Associated Fractures, excluding Spinal Fractures, Moderate—without Airway Obstruction; Eyelid and Eyeball Laceration with Retained Intraocular Foreign Body.
- 0019 Wound, Face and Neck, Open, Lacerated, Contused without Fractures, Severe—with Airway Obstructions and/or Major Vessel Involvement.
- 0020 Wound, Face and Neck, Open, Lacerated, Contused without Fractures, Moderate—without Airway Obstruction or Major Vessel Involvement.
- 0021 Eye Wound, Severe—Loss of Intraocular Fluid, with/without Retinal Detachment, with Severe Lid Laceration, Eye Not Salvageable.
- 0022 Eye Wound, Lacerated, Moderate—without Retinal Detachment or Retinal Injury, No Foreign Body Retained, without Loss of Vitreous Fluid, Patient has Hyphema, Eye Salvageable.
- 0023 Hearing Impairment, Severe.
- 0024 Hearing Impairment, Moderate.
- 0025 Fracture, Spine, Closed, without Cord Damage, Unstable Lesion.

- 0026 Fracture, Spine, Closed, without Cord Damage, Stable Lesion.
- 0027 Fracture, Spine, Closed, with Cord Damage, Cervical Spine with Respiratory Involvement.
- 0028 Fracture, Spine, Closed, with Cord Damage, Below Cervical Spine (Progressive).
- 0029 Fracture, Spine, Open, with Cord Damage, Cervical Spine with Respiratory Distress.
- 0030 Fracture, Spine, Open, with Cord Damage, Below Cervical Spine (Progressive).
- 0031 Intervertebral Disc Disorders with Nerve Root Compression Resistant to Bed Rest/Traction.
- 0032 Intervertebral Disc Disorder with Nerve Root Compression, Responding to Bed Rest/Traction.
- 0033 Strains and Sprains, Sacroiliac Region, Severe—Nonambulatory.
- 0034 Strains and Sprains, Sacroiliac Region, Moderate—Ambulatory.
- 0035 Burn, Thermal, Superficial, Head and Neck, greater than 5 percent but less than 10 percent of Total Body Area and/or Eye Involvement.
- 0036 Burn, Thermal, Superficial, Head and Neck, less than 5 percent of Total Body Area and No Eye Involvement.
- 0037 Burn, Thermal, Partial Thickness, Head and Neck, greater than 5 percent but less than 10 percent of Total Body Area and/or Eye Involvement.
- 0038 Burn, Thermal, Partial Thickness, Head and Neck, less than 5 percent of Total Body Area and No Eye Involvement.
- 0039 Burn, Thermal, Full Thickness, Head and Neck, greater than 5 percent but less than 10 percent of Total Body Area with Eye Involvement.
- 0040 Burn, Thermal, Full Thickness, Head and Neck, less than 5 percent of Total Body Area and No Eye Involvement.
- 0041 Fracture, Clavicle, Closed, All Cases.
- 0042 Wound, Shoulder Girdle, Open, with Bone Injury, Severe—Joint Involvement.
- 0043 Wound, Shoulder Girdle, Open, with Bone Injury, Moderate—No Joint Involvement.
- 0044 Fracture, Humerus, Closed, Upper Shaft, All Cases.
- 0045 Wound, Upper Arm, Open, Penetrating, Lacerated, without Fracture, Severe—with Nerve and/or Vascular Injury.
- 0046 Wound, Upper Arm, Open, Penetrating, Lacerated, without Fracture, Moderate—without Nerve or Vascular Injury.
- 0047 Wound, Upper Arm, Open with Fractures and Nerve and Vascular Injury, Arm Not Salvageable.
- 0048 Wound, Upper Arm, Open with Fractures and Nerve Injury, No Vascular Injury, Arm Salvageable.
- 0049 Fracture, Radius and Ulna, Closed, Severe—Shafts of Bones.
- 0050 Fracture, Radius and Ulna, Closed, Moderate—Colles Fracture.
- 0051 Wound, Forearm, Open, Lacerated, Penetrating, without Bone, Nerve or Vascular Injury, with Major Loss of Muscle Tissue, Severe—Requiring Major Debridement.
- 0052 Wound, Forearm, Open, Lacerated, Penetrating, without Bone, Nerve or Vascular Injury, Moderate—Not Requiring Major Debridement.
- 0053 Wound, Forearm, Open, Lacerated, Penetrating, with Fracture and with Nerve and Vascular Injury, Forearm Not Salvageable.
- 0054 Wound, Forearm, Open, Lacerated, Penetrating, with Fracture and with Nerve and Vascular Injury, Forearm Salvageable.
- 0055 Fracture, Hand or Fingers, Closed, Severe—Requiring Open Reduction.
- 0056 Fracture, Hand and/or Fingers, Closed, Moderate—Not Requiring Closed Reduction.

- 0057 Wound, Hand and/or Fingers; Open, Lacerated without Fractures, Severe—Superficial and Deep Tendon Involvement.
- 0058 Wound, Hand and/or Fingers, Open, Lacerated without Fractures, Moderate—No Tendon Involvement or Limited to Sublimis Tendon Involvement.
- 0059 Wound, Hand, Open, Lacerated, Contused, Crushed, with Fracture(s), All Cases—Involving Fractures of Carpals and/or Metacarpals.
- 0060 Wound, Fingers, Open, Lacerated, Contused, Crushed, with Fracture(s) of Phalangeals, Requiring Rehabilitation.
- 0061 Crush Injury, Upper Extremity, Severe—Limb Not Salvageable.
- 0062 Crush Injury, Upper Extremity, Moderate—Limb Salvageable.
- 0063 Patient Condition Code Not Assigned.
- 0064 Dislocation, Shoulder, Closed, All Cases.
- 0065 Dislocation/Fracture, Elbow, Closed, Acute, All Cases.
- 0066 Patient Condition Code Not Assigned.
- 0067 Dislocation, Hand or Wrist, Closed, Acute.
- 0068 Dislocation, Fingers, Closed, Acute.
- 0069 Amputation, Hand, Traumatic, Complete, All Cases.
- 0070 Amputation, Forearm, Traumatic, Complete, All Cases.
- 0071 Amputation, Full Arm, Traumatic, Complete, All Cases.
- 0072 Sprain, Wrist, Closed, Acute, All Cases.
- 0073 Sprain, Thumb, Closed, Acute, Severe.
- 0074 Sprain, Fingers, Closed, Acute, Moderate—No Thumb Involvement.
- 0075 Burn, Thermal, Superficial, Upper Extremities, greater than 10 percent but less than 20 percent of Total Body Area Involved.
- 0076 Burn, Thermal, Superficial, Upper Extremity, less than 10 percent of Total Body Area Involved.
- 0077 Burn, Thermal, Partial Thickness, Upper Extremities, greater than 10 percent but less than 20 percent of Total Body Area Involved.
- 0078 Burn, Thermal, Partial Thickness, Upper Extremity, less than 10 percent of Total Body Area Involved.
- 0079 Burn, Thermal, Full Thickness, Upper Extremities, greater than 10 percent but less than 20 percent of Total Body Area Involved.
- 0080 Burn, Thermal, Full Thickness, Upper Extremity less than 10 percent of Total Body Area Involved.
- 0081 Fracture, Ribs, Closed, Severe—Multiple Fractures.
- 0082 Fracture, Rib(s), Closed, Moderate.
- 0083 Injury, Lung, Closed (Blast Crush) with Pneumothorax, Severe—One Lung with Pulmonary Contusion and Acute, Severe Respiratory Distress.
- 0084 Injury, Lung, Closed (Blast Crush) with Pneumothorax, Moderate—One Lung with Pulmonary Contusion and Respiratory Distress.
- 0085 Wound, Thorax (Anterior or Posterior), Open, Superficial, Lacerated, Contused, Abraded, Avulsed, Requiring Major Debridement.
- 0086 Wound, Thorax (Anterior or Posterior), Open, Superficial, Lacerated, Contused, Abraded, Avulsed, Not Requiring Major Debridement.
- 0087 Wound, Thorax (Anterior or Posterior), Open, Penetrating, with Associated Rib Fractures and Pneumothorax, Acute, Severe Respiratory Distress.

- 0088 Wound, Thorax (Anterior or Posterior), Open, Penetrating, with Associated Rib Fractures and Pneumohemothorax, Moderate Respiratory Distress.
- 0089 Patient Condition Code Not Assigned.
- 0090 Burn, Thermal, Superficial, Trunk, greater than 20 percent but less than 30 percent of Total Body Area Involved.
- 0091 Burn, Thermal, Superficial, Trunk, greater than 10 percent but less than 20 percent of Total Body Area Involved.
- 0092 Burn, Thermal, Partial Thickness, Trunk, greater than 20 percent but less than 30 percent of Total Body Area Involved.
- 0093 Burn, Thermal, Partial Thickness, Trunk, greater than 10 percent but less than 20 percent of Total Body Area Involved.
- 0094 Burn, Thermal, Full Thickness, Trunk, greater than 20 percent but less than 30 percent of Total Body Area Involved.
- 0095 Burn, Thermal, Full Thickness, Trunk, greater than 10 percent but less than 20 percent of Total Body Area Involved.
- 0096 Wound, Abdominal Wall (Anterior or Posterior), Lacerated, Abraded, Contused, Avulsed without Entering Abdominal Cavity, Severe—Requiring Major Debridement.
- 0097 Wound, Abdominal Wall (Anterior or Posterior), Lacerated, Abraded, Contused, Avulsed without Entering Abdominal Cavity, Not Requiring Major Debridement.
- 0098 Wound, Liver, Closed, Acute (Crush Fracture), Major Liver Damage.
- 0099 Wound, Liver, Closed, Acute (Crush Fracture), Minor Liver Damage.
- 0100 Wound, Spleen, Closed, Acute (Crush Fracture), All Cases.
- 0101 Wound, Abdominal Cavity, Open, with Lacerating, Penetrating, Perforating Wound to the Large Bowel.
- 0102 Wound, Abdominal Cavity, Open, with Lacerating, Penetrating, Perforating Wound to Small Bowel, without Major or Multiple Resections.
- 0103 Wound, Abdominal Cavity, Open, with Penetrating, Perforating Wound of Liver, Major Damage.
- 0104 Wound, Abdominal Cavity, Open, with Penetrating, Perforating Abdominal Wound with Lacerated Liver.
- 0105 Wound, Abdominal Cavity, Open, with Penetrating, Perforating Wound of Spleen.
- 0106 Wound, Abdominal Cavity, Open, with Lacerated, Perforated Wound with Shattered Kidney.
- 0107 Wound, Abdominal Cavity, Open, with Lacerated, Penetrating, Perforating Wound with Lacerated Kidney, Initially Repaired, but Subsequent Nephrectomy.
- 0108 Wound, Abdominal Cavity, Open with Lacerated, Penetrating, Perforated Wound with Shattered Bladder.
- 0109 Wound, Abdominal Cavity, Open with Lacerated, Penetrating, Perforated Wound with Lacerated Bladder.
- 0110 Wound, Buttocks, Severe—Open, Lacerated, Penetrating, Perforating, and Avulsed.
- 0111 Wounds, Buttocks, Moderate—Open, Lacerated, Contused, and Abraded.
- 0112 Displaced Fracture of Pelvis, Closed, with Associated Soft Tissue Damage and Pelvic Organ Damage.
- 0113 Non-Displaced Fracture of Pelvis, Closed, with Associated Soft Tissue Damage.
- 0114 Wound, Abdomen, Open, with Pelvic Fracture and Penetrating, Perforating Wounds to Multiple Pelvic Structures (Male or Female).

- 0115 Wound, Abdomen, Open, with Pelvic Fracture and Penetrating, Perforating Wounds to Pelvic Colon Only (Male or Female).
- 0116 Wound, External Genitalia, Male, Severe—Lacerated, Avulsed, Crushed.
- 0117 Wound, External Genitalia, Male, Moderate—Abraded and Contused.
- 0118 Wound, External Genitalia, Female, Severe—Lacerated, Avulsed, Crushed.
- 0119 Wound, External Genitalia, Female, Moderate—Abraded, Contused.
- 0120 Fracture, Closed, Femur, Shaft, All Cases.
- 0121 Wound, Thigh, Open, without Fracture, Nerve, or Vascular Injury, Requiring Major Debridement.
- 0122 Wound, Thigh, Open, without Fracture, Nerve, or Vascular Injury, Not Requiring Major Debridement.
- 0123 Wound, Thigh, Open, Lacerated, Penetrating, Perforating with Fracture and Nerve/Vascular Injury, Limb Not Salvageable.
- 0124 Wound, Thigh, Open, Lacerated, Penetrating, Perforating, with Fracture and Nerve and/or Vascular Injury, Limb Salvageable.
- 0125 Wound, Knee, Open, Lacerated, Penetrating, Perforating, with Joint Space Penetration, Shattered Knee.
- 0126 Wound, Knee, Open, Lacerated, Penetrating, Perforating, with Joint Space Penetration, Articular Cartilage Damage, No Bone Injury.
- 0127 Fracture, Closed, Tibia and Fibula, Shaft, All Cases.
- 0128 Wound, Lower Leg, Open, Lacerated, Penetrating, Perforating, without Fractures, Requiring Major Debridement.
- 0129 Wound, Lower Leg, Open, Lacerated, Penetrating, Perforating, without Fractures, Not Requiring Major Debridement.
- 0130 Wound, Lower Leg, Open, Lacerated, Penetrating, Perforating, with Fracture and Nerve/Vascular Injury, Limb Not Salvageable.
- 0131 Wound, Lower Leg, Open, Lacerated, Penetrating, Perforating, with Fracture and Nerve and/or Vascular Injury, Limb Salvageable.
- 0132 Fracture, Ankle/Foot, Closed, Displaced, Requiring Reduction.
- 0133 Fracture, Ankle/Foot, Closed, Nondisplaced, Not Requiring Reduction.
- 0134 Wound, Ankle, Foot, Toes, Open, Lacerated, Contused, without Fractures, but Requiring Major Debridement.
- 0135 Wound, Ankle, Foot, Toes, Open, Lacerated, Contused, without Fractures, Not Requiring Major Debridement.
- 0136 Wound, Ankle, Foot, Toes, Open, Penetrating, Perforating, with Fractures and Nerve/Vascular Injury, Limb Not Salvageable.
- 0137 Wound, Ankle, Foot, Toes, Open, Penetrating, Perforating, with Fractures and Nerve and/or Vascular Injury, Limb Salvageable.
- 0138 Crush Injury, Lower Extremity, Limb Not Salvageable.
- 0139 Crush Injury, Lower Extremity, Limb Salvageable.
- 0140 Dislocation, Hip, Closed, Acute, All Cases.
- 0141 Tear, Ligaments, Knee, Acute, Complete Rupture.
- 0142 Tear, Ligaments, Knee, Acute, Incomplete Rupture.
- 0143 Dislocation, Toes, Closed, Acute, All Cases.
- 0144 Amputation, Foot, Traumatic, Complete, All Cases.

- 0145 Amputation, Below Knee, Traumatic, Complete, All Cases.
- 0146 Amputation, Traumatic, Complete, Requiring Hip Disarticulation.
- 0147 Amputation, Above Knee, Traumatic, Complete.
- 0148 Sprain, Ankle, Closed, Acute, with Complete Ligament Rupture.
- 0149 Sprain, Ankle, Closed, Acute, Grade 2, Incomplete Ligament Rupture.
- 0150 Burn, Thermal, Superficial, Lower Extremities and Genitalia, greater than 30 percent but less than 40 percent of Total Body Area Involved.
- 0151 Burn, Thermal, Superficial, Lower Extremity and Genitalia, greater than 15 percent but less than 30 percent of Total Body Area Involved.
- 0152 Burn, Thermal, Partial Thickness, Lower Extremities and Genitalia, greater than 30 percent but less than 40 percent of Total Body Area Involved.
- 0153 Burn, Thermal, Partial Thickness, Lower Extremity and Genitalia, greater than 15 percent but less than 30 percent of Total Body Area Involved.
- 0154 Burn, Thermal, Full Thickness, Lower Extremities and Genitalia, greater than 30 percent but less than 40 percent of Total Body Area Involved.
- 0155 Burn, Thermal, Full Thickness, Lower Extremity and Genitalia, greater than 15 percent but less than 30 percent of Total Body Area Involved.
- 0156 Blisters, Hand, Fingers, Foot, Toes, Due to Friction, Acute, Moderate, All Cases.
- 0157 Insect Bites and Stings (Unspecified Body Area) with Systemic Symptoms and/or Respiratory Difficulty.
- 0158 Bites and Stings (Unspecified Body Area), Moderate—Localized Symptoms.
- 0159 Multiple Injury Wound (MIW) Brain and Chest with Sucking Chest Wound and Pneumohemothorax.
- 0160 MIW Brain and Abdomen with Penetrating, Perforating Wound, Colon.
- 0161 MIW Brain and Abdomen with Penetrating, Perforating Wound, Kidney.
- 0162 MIW Brain and Abdomen with Penetrating, Perforating Wound, Bladder.
- 0163 MIW Brain and Abdomen with Shock and Penetrating, Perforating Wound, Spleen.
- 0164 MIW Brain and Abdomen with Shock and Penetrating, Perforating Wound, Liver.
- 0165 MIW Brain and Lower Limbs Requiring Bilateral Above Knee Amputations.
- 0166 MIW Chest with Pneumohemothorax and Abdomen with Penetrating Wound, Colon.
- 0167 MIW Chest with Pneumohemothorax and Abdomen with Penetrating, Perforating Wound, Kidney.
- 0168 MIW Chest with Pneumohemothorax and Abdomen with Perforating Wound, Bladder.
- 0169 MIW Chest with Pneumohemothorax and Abdomen with Penetrating, Perforating Wound, Spleen.
- 0170 MIW Chest with Pneumohemothorax and Abdomen with Penetrating, Perforating Wound, Liver.
- 0171 MIW Chest with Pneumohemothorax and Limbs with Fracture and Vascular Injury.
- 0172 MIW Abdomen with Penetrating, Perforating Wound of Colon and Bladder.
- 0173 MIW Abdomen with Penetrating, Perforating Wound of Colon and Spleen.
- 0174 MIW Abdomen with Penetrating, Perforating Wound of Colon and Liver.
- 0175 MIW Abdomen and Limbs with Penetrating, Perforating Wound of Colon and Open Fracture and Neurovascular Injury of Salvageable Lower Limb.
- 0176 MIW Abdomen and Pelvis with Penetrating, Perforating Wound of Liver and Kidney.
- 0177 MIW Abdomen and Pelvis with Penetrating, Perforating Wounds of Spleen and Bladder.

- 0178 MIW Abdomen, Pelvis, Limbs, with Fracture and Neurovascular Injury, Limb Salvageable, and Penetrating Wound, Kidney.
- 0179 MIW Abdomen, Pelvis, Limbs, without Fracture or Neurovascular Injury, and Penetrating, Perforating Wound, Bladder.
- 0180 MIW Abdomen and Lower Limbs, with Fracture and Nerve Injury, with Penetrating Wound of Spleen, with Full Thickness Burns to greater than 20 percent of TBSA.
- 0181 MIW, Abdomen and Limbs, without Fracture or Nerve Injury, with Penetrating Wound of Liver.
- 0182 MIW Chest with Pneumothorax, Soft Tissue Injury to Upper Limbs, and Penetrating Wound of Brain.
- 0183 MIW Chest with Pneumothorax, Soft Tissue Injury to Upper Limbs and Abdomen, with Wound of Colon.
- 0184 MIW Chest with Pneumothorax, Pelvis and Abdomen, with Wound of Colon and Bladder.
- 0185 MIW Abdomen and Chest with Multiple Organ Damage.
- 0186 Multiple, Nonperforating Fragment Wounds of Skin and Soft Tissue.
- 0187 Trench Foot, Immersion Foot, Severe—Vesicle Formation.
- 0188 Trench Foot, Immersion Foot, Moderate—No Vesicle Formation.
- 0189 Hypothermia, Moderate.
- 0190 Frostbite, Full Skin Thickness or Deeper Involvement.
- 0191 Frostbite, less than Full Skin Thickness.
- 0192 Hypothermia, Severe.
- 0193 Heat Stroke.
- 0194 Heat Exhaustion.
- 0195 Heat Cramps, All Cases.
- 0196 Appendicitis, Acute, with Perforation, Rupture, Peritonitis.
- 0197 Appendicitis, Acute, without Perforation, Rupture, Peritonitis.
- 0198 Inguinal Hernia, Complicated, Direct or Indirect, Sliding, Incarceration of Bowel.
- 0199 Inguinal Hernia, Uncomplicated, Direct or Indirect, No Sliding, No Incarceration of Bowel or Bladder.
- 0200 Internal Derangement of Knee, Chronic, with Torn Meniscus and/or Ligament Laxity.
- 0201 Strain, Lumbosacral, Sacroiliac Joint, Chronic, All Cases.
- 0202 Eczema, Dermatitis, Seborrheic, Contact, Others, Affecting Weight Bearing and Pressure Areas.
- 0203 Eczema, Dermatitis, Seborrheic, Contact, Others, Not Affecting Weight Bearing Areas.
- 0204 Boils, Furuncles, Pyoderma, Requiring Surgery.
- 0205 Boils, Furuncles, Pyoderma, All Other Cases.
- 0206 Cellulitis, Involving Face or Weight Bearing Areas.
- 0207 Cellulitis, Other than Face or Weight Bearing Areas.
- 0208 Dermatophytosis, Severe—Affecting Feet.
- 0209 Dermatophytosis, All Other Cases.
- 0210 Pediculosis, All Cases.
- 0211 Scabies, All Cases.
- 0212 Pilonidal Cyst/Abscess, Requiring Incision and Drainage.
- 0213 Pilonidal Cyst/Abscess, Requiring Minor Incision.
- 0214 Ingrown Toenails, Bilateral, with Secondary Infections, Unresolvable at Level II.
- 0215 Ingrown Toenails, without Secondary Infection.

0216	Herpes Simplex and Zoster, without Encephalitis, All Types, All Cases.
0217	Patient Condition Code Not Assigned.
0218	Patient Condition Code Not Assigned.
0219	Hyperhidrosis, All Cases.
0220	Blepharitis, All Cases.
0221	Conjunctivitis, Severe—All Cases.
0222	Conjunctivitis, Moderate, All Cases.
0223	Corneal Ulcer.
0224	Corneal Abrasion.
0225	Iridocyclitis, Acute, Marked Visual Impairment.
0226	Iridocyclitis, Acute, Minimal Visual Impairment.
0227	Refraction and Accommodation Disorders, Refraction Required.
0228	Refraction and Accommodation Disorders, Replacement of Spectacles Required.
0229	Otitis Externa, All Cases.
0230	Otitis Media, Acute, Suppurative, All Cases.
0231	Patient Condition Code Not Assigned.
0232	Allergic Rhinitis, All Cases.
0233	Upper Respiratory Infections, Acute, All Cases.
0234	Bronchitis, Acute, All Cases.
0235	Asthma, with Disabling Symptoms or Repeated Attacks.
0236	Asthma, Other Cases.
0237	Patient Condition Code Not Assigned.
0238	Patient Condition Code Not Assigned.
0239	Acute Respiratory Disease—Severe.
0240	Acute Respiratory Disease—Moderate.
0241	Patient Condition Code Not Assigned.
0242	Patient Condition Code Not Assigned.
0243	Food Poisoning, All Organisms, Disabling Symptoms.
0244	Food Poisoning, All Organisms, Moderate Symptoms.
0245	Diarrheal Disease, Severe.
0246	Diarrheal Disease, Moderate.
0247	Patient Condition Code Not Assigned.
0248	Gastritis, Acute, All Cases.
0249	Peptic Ulcer, Gastric or Duodenal, Penetrating and/or Perforating.
0250	Peptic Ulcer, Gastric or Duodenal, Uncomplicated.
0251	Regional Ileitis, Disabling Symptoms, Unresponsive to Treatment.
0252	Regional Ileitis, Responds to Treatment.
0253	Helminthiasis, All Cases.
0254	Patient Condition Code Not Assigned.
0255	Patient Condition Code Not Assigned.
0256	Hemorrhoidal Disease, All Cases.
0257	Patient Condition Code Not Assigned.
0258	Severe Hypertension.
0259	Ischemic Heart Disease.
0260	Phlebitis, Deep Vein Involvement.

0261	Patient Condition Code Not Assigned.
0262	Tenosynovitis, Elbow, Wrist, Shoulders, and so forth.
0263	Meningo-Encephalitis, Uncomplicated.
0264	Meningo-Encephalitis, Complicated.
0265	Near Drowning without Cervical Spine Injury or Hypothermia, All Cases.
0266	Toxic Inhalation, Including Burn-Related Respiratory Injuries, Severe—All Cases.
0267	Patient Condition Code Not Assigned.
0268	White Phosphorus Burns, Resultant Partial Thickness Burns < 40 percent TBSA, All Cases.
0269	Sexually Transmitted Diseases (STD), Urethritis.
0270	Sexual Transmitted Diseases (STD), Genital Ulcers and/or Adenopathy.
0271	Sexually Transmitted Diseases (STD), Complicated.
0272	Glomerulonephritis, Acute.
0273	Glomerulonephritis, Chronic.
0274	Pyelonephritis, Acute, Secondary to Obstruction.
0275	Pyelonephritis, Acute, No Obstruction.
0276	Nephrotic Syndrome, All Cases.
0277	Urethral Calculus, Causing Obstruction, Impacted.
0278	Urethral Calculus, Not Causing Obstruction.
0279	Epididymitis, Cystitis, Prostatitis, Acute, All Cases.
0280	Balanoposthitis, All Cases.
0281	Patient Condition Code Not Assigned.
0282	Infectious Mononucleosis, All Cases.
0283	Hepatitis, Infectious, Viral, All Causes.
0284	Patient Condition Code Not Assigned.
0285	Cholecystitis, Acute with Stones, All Cases.
0286	Pancreatitis, Acute, All Cases.
0287	Upper Gastrointestinal (GI) Bleed, All Cases.
0288	Patient Condition Code Not Assigned.
0289	Neoplasms, Malignant.
0290	Neoplasms, Benign.
0291	Abnormal Uterine Bleeding.
0292	Dysmenorrhea.
0293	Pelvic Inflammatory Disease (PID), All Cases.
0294	Cervicitis, Endocervicitis, with Symptomatic Leukorrhea.
0295	Vulvovaginitis.
0296	Amenorrhea.
0297	Tubal Pregnancy, All Cases.
0298	Patient Condition Code Not Assigned.
0299	Abortion, Spontaneous with Hemorrhage.
0300	Patient Condition Code Not Assigned.
0301	Psychosis.
0302	Misconduct.
0303	Non-Psychotic Mental Disorders.
0304	Stress Reaction, Severe.
0305	Dangerousness.

0306	Alcohol Related Syndromes.
0307	Deleted.
0308	Deleted.
0309	Deleted.
0310	Stress Reaction, Mild/Moderate.
0311	Eye Wound, Lacerated, Penetrated with Retinal Injury, Eye Salvageable.
0312	Wound, Knee, Open, Lacerated, Penetrating, Perforating, with Joint Space Penetration, No Bone or Articular Cartilage Injury.
0313	Wound, Abdominal Cavity, Open, with Lacerated, Penetrating, Perforating Wound, Kidney, Moderate—Kidney Salvageable.
0314	Deleted.
0315	Deleted.
0316	Deleted.
0317	Drug Related Syndromes.
0318	Deleted.
0319	Wound, Fingers, Open, Lacerated, Contused, Crushed, with Fracture(s) of Phalangeals, Not Requiring Rehabilitation.
0320	Patient Condition Code Not Assigned.
0321	Patient Condition Code Not Assigned.
0322	Fracture, Mandible, with/without Oral Laceration without Airway Involvement, Unstable, Severe, Requiring Open Reduction.
0323	Fracture, Mandible, with/without Oral Laceration without Airway Involvement, Mild Displacement, Stable.
0324	Deleted.
0325	Deleted.
0326	Patient Condition Code Not Assigned.
0327	Patient Condition Code Not Assigned.
0328	Animal Bites and Rabies Exposure.
0329	Trachoma, All Cases.
0330	Schistosomiasis, All Cases.
0331	Malaria, Severe—All Species.
0332	Malaria, Moderate—All Species.
0333	Febrile Illness, Acute, Severe—Except Malaria and Pneumonia.
0334	Febrile Illness, Acute, Moderate.
0335	Snake Bite.
0336	Patient Condition Code Not Assigned.
0337	Patient Condition Code Not Assigned.
0338	Patient Condition Code Not Assigned.
0339	Cutaneous Ulcers, including Leishmaniasis.
0340	Patient Condition Code Not Assigned.
0341	Patient Condition Code Not Assigned.
0342	Patient Condition Code Not Assigned.
0343	Patient Condition Code Not Assigned.
0344	Patient Condition Code Not Assigned.
0345	Patient Condition Code Not Assigned.

- 0346 Eye Wound, Directed Energy Induced (Laser), Severe, of Macula and/or Optic Nerve, with Vitreous Blood, Severe Visual Loss, One or Both Eyes.
- 0347 Eye Wound, Directed Energy Induced (Laser/radio frequency radiation [RFR]), Moderate to Severe, Posterior, Nonmacular, Nonoptic Nerve, Visual Loss Secondary to Vitreous Blood.
- 0348 Eye Wound, Directed Energy Induced (Laser), Moderate, Nonmacular, Nonoptic Nerve, No Vitreous Blood.
- 0349 Eye Wound, Directed Energy Induced (Laser or RFR), Mild to Moderate, Anterior, Pain with Photophobia and Disruption of Corneal Integrity.
- 0350 Eye Wound, Directed Energy Induced (Laser), Mild, Flash Blindness, No Permanent Damage.
- 0351 Anthrax, Inhalation, Nonvaccinated, Incubating, Asymptomatic.
- 0352 Anthrax, Inhalation, Nonvaccinated, Prodromal.
- 0353 Anthrax, Inhalation, Acute.
- 0354 Anthrax, Inhalation, Vaccinated, Asymptomatic.
- 0355 Anthrax, Inhalation, Vaccinated, Prodromal.
- 0356 Anthrax, Inhalation, Vaccinated, Acute.
- 0357 Plague, Inhalation, Incubating, Asymptomatic.
- 0358 Plague, Inhalation, Acute.
- 0359 Plague Meningitis.
- 0360 Botulism with Respiratory Failure.
- 0361 Botulism without Respiratory Failure.
- 0362 Staphylococcal Enterotoxin B with Respiratory Failure.
- 0363 Staphylococcal Enterotoxin B without Respiratory Failure.
- 0364 Venezuelan Equine Encephalitis with Central Nervous System Involvement.
- 0365 Smallpox, Incubating, Asymptomatic.
- 0366 Smallpox, Symptomatic.
- 0367 Tularemia, Inhalation, Incubating Asymptomatic.
- 0368 Tularemia, Inhalation, Acute.
- 0369 Ricin, Inhalation.
- 0370 Q Fever, Inhalation, Incubating, Asymptomatic.
- 0371 Q Fever, Inhalation, Acute.
- 0372 Botulism Exposure without Symptoms.
- 0373 Ebola/Marburg Virus Infection.
- 0374 Brucellosis, Inhalation.
- 0375 Through 0381 Patient Condition Code Not Assigned.
- 0382 Nerve Agent Vapor Only (Inhalation) Mild.
- 0383 Nerve Agent Vapor Moderate.
- 0384 Nerve Agent Vapor Severe.
- 0385 Nerve Agent Liquid Mild.
- 0386 Nerve Agent Liquid Moderate.
- 0387 Nerve Agent Liquid Moderately Severe.
- 0388 Nerve Agent Liquid Severe.
- 0389 Wound, Lower Leg, Open, Lacerated, Penetrating, without Fractures, Requiring Debridement, Moderately Contaminated with Liquid Nerve Agent.
- 0390 Nerve Agent Combined Penetrating Abdominal Wound.

0391	Mustard Liquid/Vapor Mild.
0392	Mustard Liquid/Vapor Moderate.
0393	Mustard Liquid/Vapor Severe.
0394	HD/Lewisite Combination, Mild.
0395	Phosgene Oxime.
0396	Cyanide (AC) Inhalation, Mild.
0397	Cyanide (AC) Inhalation, Severe.
0398	Pulmonary Agent with Early (< 4 hours) Symptoms.
0399	Pulmonary Agent with Delayed (> 4 hours) Symptoms.
0400	Anticholinergic Incapacitating Agent.
0401	White Phosphorus Injury, Skin Exposure.
0402	Radiation Exposure at Level R1(0.0 to 0.7 gray [Gy]) without Other Physical Injury. Radiophobia not Addressed. No Data Available on this Potential Psychiatric Casualty Production Issue.
0402	Radiation Exposure at Level R1(0.0 to 0.7 gray [Gy]) without Other Physical Injury. Radiophobia not Addressed. No Data Available on this Potential Psychiatric Casualty Production Issue.
0403	Radiation Injury at Level R2(0.7 to 1.25 Gy) without Other Physical Injury.
0404	Radiation Injury at Level R3(1.25 to 3.0 Gy) without Other Physical Injury.
0405	Radiation Injury at Level R4(3.0 to 5.0 Gy) without Other Physical Injury.
0406	Radiation Injury at Level R5(5.0 to 8.0 Gy) without Other Physical Injury.
0407	Radiation Injury at Level R6(8.0 to 15 Gy) without Other Physical Injury.
0408	Radiation Injury at Level R7(15+ Gy) without Other Physical Injury.
0409	Patient Condition Code Not Assigned.
0410	Radiation R1/R2(0.0 to 1.25Gy) with Operative Trauma.
0411	Radiation R3/R4(1.25 to 5.0 Gy) with Operative Trauma.
0412	Radiation R5/R6/R7(> 5.0 Gy) with Operative Trauma.
0413	Radiation R1/R2(0.0 to 1.25 Gy) with Nonoperative Trauma (Examples include Concussion, Simple Lacerations, Closed Fractures, Ligament Injuries, and so forth).
0414	Radiation R3/R4(1.25 to 5.0 Gy) with Nonoperative Trauma (Examples include Concussion, Simple Lacerations, Closed Fractures, Ligament Injuries, and so forth).
0415	Radiation R5/R6/R7(> 5.0 Gy) with Nonoperative Trauma with Nonoperative Trauma (Examples include Concussion, Simple Lacerations, Closed Fractures, Ligament Injuries, and so forth).
0416	Atropine, Self-Injection.
0417	Patient Condition Code Not Assigned.
0418	Patient Condition Code Not Assigned.
0419	Patient Condition Code Not Assigned.
0420	Radiation R1/R2(0.0 to 1.25 Gy) with Mild Burn. Burns 1st and 2nd Degree Not Involving Genitalia or Eyes.
0421	Radiation R3/R4(1.25 to 5.0 Gy) with Mild Burn. Burns 1st and 2nd Degree Not Involving Genitalia or Eyes.
0422	Radiation R5/R6/R7(> 5.0 Gy) with Mild Burn. Burns 1st and 2nd Degree Not Involving Genitalia or Eyes.
0423	Radiation R1/R2(0.0 to 1.25 Gy) with Moderate Burn. Burns 2nd Degree 16 to 30 percent Body Surface Area (BSA) or 3rd Degree 6 to 20 percent BSA Not Involving Head.
0424	Radiation R3/R4(1.25 to 5.0 Gy) with Moderate Burn. Burns 2nd Degree 16 to 30 percent BSA or 3rd Degree 6 to 20 percent BSA Not Involving Head.

- 0425 Radiation R5/R6/R7(> 5.0 Gy)with Moderate Burn. Burns 2nd Degree 16 to 30 percent BSA or 3rd Degree 6 to 20 percent BSA Not Involving Head.
- 0426 Radiation R1/R2(0.0 to 1.25 Gy) with Severe Burn. Burns 2nd Degree > 30 percent BSA or 3rd Degree > 20 percent BSA.
- 0427 Radiation R3/R4(1.25 to 5.0 Gy) with Severe Burn. Burns 2nd Degree > 30 percent BSA or 3rd Degree > 20 percent BSA.
- 0428 Radiation R5/R6/R7(> 5.0 Gy) with Severe Burn. Burns 2nd Degree > 30 percent BSA or 3rd Degree > 20 percent BSA.
- 0429 Patient Condition Code Not Assigned.
- 0430 Radiation R1/R2 (0.0 to 1.25 Gy) with Operative Trauma and Mild Burn. Burns 1st and 2nd Degree < 15 percent BSA or 3rd Degree < 5 percent BSA: Not Involving Genitalia or Eyes.
- 0431 Radiation R1/R2 (0.0 to 1.25 Gy) with Operative Trauma and Moderate Burn. Burns 1st and 2nd Degree 16 to 30 percent BSA or 3rd Degree 6 to 20 percent BSA: Not Involving Head.
- 0432 Radiation R1/R2 (0.0 to 1.25 Gy) with Operative Trauma and Severe Burn. Burns 1st and 2nd Degree > 30 percent BSA or 3rd Degree > 20 percent BSA.
- 0433 Radiation R3/R4 (1.25 to 5.3 Gy) with Operative Trauma and Mild Burn. Burns 1st and 2nd Degree < 15 percent BSA or 3rd Degree < 5 percent BSA: Not Involving Genitalia or Eyes.
- 0434 Radiation R3/R4/R5/R6/R7 (> 1.25 Gy) with Operative Trauma and Moderate or Severe Burn. Moderate Burns—2nd Degree 16 to 30 percent BSA or 3rd Degree 6 to 20 percent BSA: Not Involving Head. Severe Burns—2nd Degree > 30 percent BSA or 3rd Degree > 20 percent BSA.
- 0435 Radiation R5/R6/R7 (> 5.3 Gy) with Operative Trauma and Mild Burn. Burns 1st and 2nd Degree < 15 percent BSA or 3rd Degree < 5 percent BSA: Not Involving Genitalia or Eyes.
- 0436 Acute Glaucoma.
- 0437 Acute Traumatic Optic Neuropathy.
- 0438 Blunt Trauma to Eye; Retrobulbar Hemorrhage.
- 0439 Eye Conditions Caused By Herpes.
- 0440 Chemical Ocular Injury.
- 0441 Stress Reaction.

APPENDIX B

MEDICAL INTELLIGENCE

B-1. Aspects of Medical Intelligence

Medical intelligence is that intelligence produced from the collection, evaluation, and analysis of information concerning the medical aspects of foreign areas that have immediate or potential impact on policies, plans, and operations. Medical intelligence also includes the observation of the fighting strength of enemy forces and the formation of assessments of foreign medical capabilities in both military and civilian sectors. To develop medical intelligence, information is gathered, evaluated, and analyzed on the following subjects:

- Endemic and epidemic diseases, public health standards and capabilities, and the quality and availability of health services.
- Occupational and environmental health hazards (to include TIMs, environmental quality, and industrial operations and/or industries) present in the AO.
- Health service logistics, to include blood products, MTFs, and the number of trained HSL personnel.
- The location, specific diseases, strains of bacteria, lice, mushrooms, snakes, fungi, spores, and other harmful organisms (toxic flora and fauna).
 - Foreign animal and plant diseases, especially those diseases transmissible to humans.
 - Health problems relating to the use of local food and water supplies.
 - Medical effects of radiation and prophylaxis for BW and CW agents.
 - The possible casualties that can be produced by newly developed foreign weapon systems.
 - The health and fitness of the enemy's force and his use of antidotes and immunizations.
- Areas of operations (such as altitude, extremes of temperature, and difficult terrain [swamps, mountains, deserts, or urban]) that in some way may affect the health of the command or the conduct of HSS operations.

B-2. Significance of Medical Intelligence

a. At the strategic level, the objective of medical intelligence is to contribute to the formulation of national and international policy. The policy will be predicated in part on foreign military and civilian capabilities of the medical or biological scientific community.

b. At the operational level, the objective of medical intelligence is to develop HSS strategies that—

- Counter the medical threat. (Refer to FM 4-02.17, 4-25.12, FM 8-10-8, and FM 21-10.)

FM 4-02

- Are responsive to the unique aspects of a particular theater.
- Enable the commander to conduct his operation.
- Conserve the fighting strength of friendly forces.

B-3. Sources of Medical Intelligence

a. Medical intelligence is provided to the HSS planner by intelligence organizations. The HSS planner must identify the intelligence requirements and provide that request to the supporting intelligence element within the command or task force (TF). In an emergency, up-to-date medical intelligence assessments can be obtained by contracting Director, AFMIC, 1607 Porter Street, Fort Detrick, Maryland 21702-5004. The message address is DIRAFMIC FT DETRICK MD. Medical intelligence elements and AFMIC can provide Medical Capabilities Studies, Disease Occurrence—Worldwide Reports, Foreign Medical Materiel Studies, the Disease and Environmental Alert Report, the Foreign Medical Facilities Handbook, Scientific and Threat Intelligence Studies, Foreign Medical Materiel Exploitation Reports, Quick Reaction Responses, and the AFMIC Wire. The HSS planner should use all available intelligence elements to obtain needed intelligence to support the military operation. The AFMIC 24-Hour Service/Request for Information telephone number is commercial (310) 619-7574 or DSN 343-7574. The e-mail address is afmicops@afmic.detrack.army.mil. Refer to FM 8-10-8 for a discussion of medical intelligence.

b. A supporting intelligence element should exist at some point in the medical unit's chain of command. This element will be the primary source for the HSS planner to access the necessary intelligence for the execution of HSS operations. The HSS personnel must develop a feedback system with the supporting intelligence element to provide as well as receive intelligence updates.

c. For additional information on medical intelligence refer to FM 4-02.17 and FM 8-10-8.

B-4. Medical Intelligence Preparation of the Battlefield

a. Medical intelligence preparation of the battlefield is a systematic process that is designed to aid HSS planners in analyzing various enemy, environmental, and medical threats in a specific AO. The MIPB process is the first step in the mission analysis phase of the MDMP. The information derived from conducting a proper MIPB is the cornerstone to developing detailed and effective HSS estimates and plans. Some portions of the template will be more or less applicable depending on the assigned mission. The purpose of MIPB is to—

- Define the battlefield environment.
- Describe the battlefield effects on deployed forces and HSS operations.
- Conduct threat integration (enemy and medical) and information consolidation.

B-2

b. Some of the categories may seem contrived when applying them to stability operations and support operations situations. The HSS planner must, therefore, interpret the categories and apply the pertinent information or modify the category to fit the operational scenario. In some stability operations and support operations scenarios, there may not be a recognizable enemy; the *enemy* and *friendly* situation paragraphs of the MIPB can be thought of as *negative* and *positive* factors impacting on the successful accomplishment of the HSS mission. For example, in a discussion of opposition groups, it is conceivable that an organized opposition may not be apparent in a country where a FHA program or disaster relief effort is being conducted. The HSS planner should, therefore, consider those situations and factors which could foster an insurgency or the formation of opposition groups and focus the HSS operations to proactively correct anticipated deficiencies, thereby eliminating the possible threat. For additional information and considerations for stability operations and support operations refer to FM 8-42. For additional HSS planning considerations refer to FM 8-10-8 and FM 8-55.

B-5. Medical Intelligence Preparation of the Battlefield Template

a. Define the Battlefield Environment.

(1) Identify significant characteristics of the environment.

(a) Geography. (*This includes climate, weather, terrain [to include urban terrain], and altitude. It may also contain information on possible weather/environmental threats such as earthquakes, volcanoes, monsoons, or other such conditions.*)

(b) Political and socioeconomic situation. (*This includes population demographics [ethnic groups, religious groups, age distribution, income groups, culture, and language]; living conditions of the general population; infant mortality rate; anticipated requirements for medical support of the local population; refugee or displaced persons situation; role of clans, tribes, gangs, opposition groups, or paramilitary organizations/groups; and, crime rates and the presence of organized crime.*)

(c) Threat forces and capabilities. (*This includes enemy ideology, goals, objectives, and mission; enemy attitude toward the Geneva Conventions; order of battle [in broad terms]; enemy force structure and weapons systems; enemy capability to generate friendly casualties and the types of wounds/injuries anticipated; enemy medical doctrine and capabilities [are US forces likely to treat significant numbers of enemy wounded; what is the overall health status of the enemy such as significant endemic/epidemic diseases present and/or immunization status]; NBC casualties [include type of weapons/agents, delivery systems, doctrine for use, and ability to sustain operations in an NBC environment]; medical logistics structure [quality, quantity, availability, and types of medical equipment]; potential for terrorist actions and the availability and probability of the use of NBC weaponry/devices; enemy psychological operations [PSYOP] and unconventional warfare [UW] capability).*

(d) Infrastructure. (*The infrastructure includes transportation systems [land, sea, and air]; communications systems [telephone, cellular, digital, mass media, and electronic means]; and, utilities [water, electricity, and sanitation].*)

(e) Medical infrastructure. (This includes location and availability of medical facilities; quality and type of medical facilities [names and contact information for practitioners and health administrators are useful]; capabilities of medical facilities [size, patient capacity, and types of specialties]; education and training levels of health services professionals and ancillary support personnel; will enemy forces use or have access to civilian medical system; are medical facilities approved for use by US, allied, or coalition forces; quality and availability of medical supplies and pharmaceuticals [do pharmaceuticals meet FDA standards?]; availability and quality [to include testing requirements in accordance with the American Blood Banking Association standards] of blood and blood products; evacuation capability, services, and availability [to include names and contact information]; location of helipads, railheads, airheads, and sea-ports; and location of medical waste incinerators, disposal areas, and/or availability of contract support.)

(f) Medical threat. (Refer to Table B-1 for a medical threat checklist.)

Table B-1. Medical Threat Checklist

MEDICAL THREAT CHECKLIST	
DISEASES	ENDEMIC AND EPIDEMIC FOODBORNE WATERBORNE ARTHROPODBORNE ZONOTIC VECTORS AND BREEDING GROUNDS
OCCUPATIONAL AND ENVIRONMENTAL HEALTH HAZARDS	CLIMATIC (HEAT, COLD, HUMIDITY, AND SIGNIFICANT ELEVATIONS ABOVE SEA LEVEL) TOXIC INDUSTRIAL MATERIALS ACCIDENTAL OR DELIBERATE DISPERSION OF RADIOLOGICAL AND BIOLOGICAL MATERIEL DISRUPTION OF SANITATION SERVICES/FACILITIES (SUCH AS SEWAGE AND WASTE DISPOSAL) DISRUPTION OF INDUSTRIAL OPERATIONS OR INDUSTRIES NOISE
POISONOUS OR TOXIC FLORA AND FAUNA	POISONOUS REPTILES, AMPHIBIANS, ARTHROPODS, AND ANIMALS TOXIC AND POISONOUS PLANTS
MEDICAL EFFECTS OF WEAPONS	CONVENTIONAL NUCLEAR, BIOLOGICAL, AND CHEMICAL DIRECTED ENERGY WEAPONS OF MASS DESTRUCTION
PHYSIOLOGIC AND PSYCHOLOGICAL STRESSORS	CONTINUOUS OPERATIONS BATTLE FATIGUE WEAR OF MISSION-ORIENTED PROTECTIVE POSTURE ENSEMBLE STABILITY OPERATIONS AND SUPPORT OPERATIONS HOME FRONT ISSUES

(g) Nongovernmental organizations operating in the AO. *(This includes such organizations as the International Committee of the Red Cross [ICRC] and Doctors without Borders.)*

(2) Identify the limits of the command AO. *(The command AO is the geographic area where the commander is assigned the responsibility and authority to conduct military operations.)*

(a) Identify the geographic AO. *(This may include the macroview or the microview depending upon the level of command and the size of the geographic area.)*

(b) Identify the total population at risk. *(This should include all US, allied, coalition, or HN forces, local civilian population, refugees, displaced persons, employees and/or contractors of the US Government, and NGO personnel. In addition to identifying the total population at risk, the planner must also determine what the supported population at risk is [those individuals/groups deemed as eligible beneficiaries for health care provided by US Army HSS assets (refer to Appendix F)].)*

(c) Identify all supported US units. *(This includes sister Services and elements from US governmental agencies and contractors.)*

(d) Identify all supported allied, coalition, HN, or other multinational units/elements. *(This paragraph should discuss unit troop strengths, locations and missions. It may also include organic medical resources and capabilities; multinational medical assets [military, paramilitary, and civilian] which are approved for use for US personnel; identification of multinational [military, paramilitary, and civilian] requirements; identification of unique medical support requirements [such as endemic diseases in the allied and coalition forces that are not present in the deployment (HN) AO]; and, the current level of health and dental fitness among the supported populations.)*

(3) Establish limits of the area of interest (AI). *(The AI is a geographic area from which information is required to facilitate planning. The AI usually falls outside the AO and may or may not be applicable to a particular operation. The AI would be of interest in instances where portions of the overall HSS plan fall outside the AO.)*

(a) Health service support is being provided by organizations/elements outside of the AO. *(This can include organizations such as CONUS-support base hospitals, HSL support [DLA or USAMMA], and global patient regulating support [such as the GPMRC]).*

(b) Location and time/distance factors for HSS resources that could be used for augmenting/reinforcing/reconstituting HSS units/personnel within the AO. *(This can include information on units/elements in the CONUS-support base or adjacent theaters.)*

(c) Coordination and synchronization with C2 assets outside the AO.

(d) Follow-on operations or operations being conducted simultaneously outside the AO.

(4) Identify the level of detail required and the time available to conduct MIPB.

(5) Evaluate existing information/intelligence of medical significance and identify intelligence gaps. (*Sources include: AFMIC; Defense Intelligence Agency [DIA]; USACHPPM; country studies; supporting Intelligence Officer, US Army [S2]/Assistant Chief of Staff [Intelligence] [G2] or military intelligence unit; Central Intelligence Agency [CIA] World Fact Book; open source information system [OSIS]; tourist maps and brochures; PVNTMED resources; WHO; PAHO; Department of State; and, internet, libraries, and other informational sources.*)

(6) Identify and submit collection requirements to support intelligence staff sections/elements/units.

(7) Collect required information to fill gaps.

NOTE

Should HSS personnel gain information of potential intelligence value through casual observation of activities in plain view while in the performance of their humanitarian duties, they are required to report it to their supporting intelligence element (S2/G2). Refer to FM 8-10-8 for additional information.

b. Describe the Battlefield Effects. The purpose of this phase of the MIPB process is to analyze and integrate various factors of the battlefield environment (paragraph *a* above). Detailed analysis of these factors, to determine the military significant effects, results in medical intelligence upon which the commander can make informed decisions. The emphasis is on the effects on friendly forces as well as friendly and enemy actions.

(1) Geography.

(a) Climate and weather effects. (*Information contained here includes the effects of extreme heat/cold/humidity; effects of the predominant weather patterns [such as monsoons]; effects of heavy rains or snow; the phase of the moon and its effect on operations [such as fullness/brightness when military forces are infiltrating an area]; how the weather may be effected by enemy BW and CW agents use; and, climatic effects on medical supplies and equipment.*)

(b) Terrain analysis. (*Terrain analysis includes determining the effect on friendly/enemy maneuver capability; effect on friendly/enemy ability to sustain health care; effects on timely medical evacuation; natural lines of patient drift; impact on MTF site selection factors; where the mobility corridors are located and their effects on friendly/enemy actions; effects of weather conditions on terrain/mobility; effect of overhead cover [canopy] and vegetation; effect on projected combat action on terrain/mobility; and, where potential sources of potable water are located.*)

(c) Altitude effects. (*This includes effect of high altitude operations on force capability, rotary wing evacuation assets, and standard medical treatment protocols.*)

(2) Political and socioeconomic situation.

(a) Population demographics. *(This includes the effect on the delivery of HSS to supported forces; effect on the HSS system if required to support the local populace and NGOs; what are the political effects of providing care/not providing care to the HN populace, NGOs, refugees, and displaced persons; effects of cultural, religious, or language barriers.)*

(b) Condition of the general population (and/or supported population). *(This category includes an analysis of the health of the general population and the impact of it on deployed forces; analysis of the infant mortality rate as this serves as an indicator of the overall health of the population; status of nutrition; and, state of advancement of the medical infrastructure [see paragraph (5) below].)*

(c) Effect clans, tribes, gangs, opposition groups, or paramilitary organizations/groups and organized crime on the ability to provide HSS to deployed forces and other eligible beneficiaries.

(d) What affect/additional requirements will refugees, internally displaced persons (IDPs), detainees/retainees, and EPWs have on the HSS system? *(This is of particular importance for the PVNTMED arena as camps require sanitation, pest management, and potable water support. Other requirements include provision of sick call services, outpatient treatment, hospitalization, medical evacuation, HSL support [to include sorting, repackaging, inventorying, and disseminating donated medical supplies and equipment], and other functional area concerns.)*

(3) Threat forces capabilities/effects.

(a) Effects of enemy ideology, goals, and missions. *(This category includes an analysis of the enemy's will to fight; what they are trying to accomplish and why [military objectives]; compliance with the Geneva Conventions; type of enemy forces [such as paramilitary, conventional, special operations and/or terrorists]; philosophy concerning collateral damage, civilian casualties, disruption of utilities [sewage, waste disposal, sanitation, water, electricity, and gas], and, generating refugees or displaced persons.)*

(b) Order of battle. *(The order of battle includes the affects enemy doctrine has on deployed forces, to include medical personnel and units. This information facilitates forecasting what friendly units/elements/organizations are most likely to sustain heavy casualties.)*

(c) Enemy force structure and weapons systems. *(This category includes the analysis of the accuracy and range of enemy weapons systems; analysis of the size and composition of the enemy force; and, what types of friendly wounds will be generated by enemy weapons systems [such as piercing, concussion, blunt trauma, burns, or combined injuries].)*

(d) Enemy medical doctrine/capabilities. *(This includes the analysis of enemy medical doctrine and capabilities; priority and availability of medical care and medical evacuation; do they have the infrastructure and training to accomplish the HSS mission; and, the potential for them to treat their own casualties or to leave them for friendly forces to take care of.)*

(e) Effects of enemy NBC weapons. *(This category includes an analysis of enemy NBC capabilities; effect of enemy NBC use on friendly forces; the likelihood of its use; whether the enemy can continue the mission in an NBC environment; and whether the enemy's delivery systems are accurate, reliable, and effective.)*

(f) Psychological and unconventional warfare capabilities and effects. *(This includes an analysis of the probable impact of PSYOP on friendly forces; analysis of UW capabilities; probability of UW forces targeting friendly rear areas and HSS assets/resources; and, the effect UW will have on the delivery of health care.)*

(4) Infrastructure.

(a) Transportation systems. *(Transportation systems include the effect of available transportation systems on timely medical evacuation and/or CASEVAC, HSL supply/resupply operations; analysis of likely avenues of approach; effect of the transportation system on mobility and military operations; effect of military operations on the transportation system; and, impact of transportation networks on enemy/friendly COAs.)*

(b) Communication systems architecture. *(What types of communications networks currently exist? What is the level of technology for these systems? What is the level of access of the communications infrastructure by the population [Do families have: Radios? Televisions? Telephones? Computers?].)*

(c) Utilities (water, electricity, and sanitation). *(This includes the analysis of water quality [potability] and distributions systems; analysis of the reliability of electrical power generation; effectiveness and efficiency of sanitation systems; effects of enemy/friendly military actions on the utilities infrastructure; and, the impact a disruption of utilities would have on the health of the general population and/or deployed forces.)*

(d) Industries. *(This includes the types of industry present, their effect on the economy, and the potential threat from TIMs either used in the manufacturing process or as an end product.)*

(5) Medical infrastructure.

(a) Analysis of the overall medical system: *(A checklist for assessing the foreign medical infrastructure is provided in Table B-2.)*

(b) Analysis of indigenous medical facilities. *(A checklist for assessing foreign MTF capabilities and services is provided in Table B-3.)*

(c) Analysis of local medical supply and equipment sources. *(This category includes an analysis of local quantity, quality, and availability of local medical supplies and equipment; analysis of the availability of blood and blood products [see paragraph a(1)(e) above]; availability of supplies for use for local populace, refugees, IDPs, retained/detained persons, and EPWs [to include donated supplies or those of an NGO/international organization such as the UN]; availability of supplies approved for use by US*

forces [see paragraph a(1)(e) above]; analysis of local medical supply production facilities; impact of military operations on the local medical supply infrastructure; and, availability and quality of medicinal gases.)

Table B-2. Checklist for the Analysis of Foreign Medical System

HEALTH SERVICES
• PUBLIC HEALTH SYSTEM/SERVICES. • NUMBER OF PUBLIC HEALTH PERSONNEL, FACILITIES, AND CAPABILITIES. • HOSPITALS BY TYPE AND LOCATION (SUCH AS GENERAL MEDICAL, PSYCHIATRIC, OR ORTHOPEDIC). • NUMBER OF HOSPITAL BEDS BY TYPE (SUCH AS SURGICAL, INTENSIVE CARE, OR GENERAL MEDICINE). • NUMBER OF OR TABLES AND TABLE HOURS. • MEDICAL CLINICS (PRIVATE OR PUBLIC) AND LOCATIONS. • NUMBER OF PHYSICIANS PER POPULATION. • NUMBER OF PHYSICIANS BY SPECIALTY. • ANCILLARY SERVICES AVAILABLE (SUCH AS PT, OT, ORTHOTICS CAPABILITY, COMMUNITY HEALTH NURSES, MAGNETIC RESONANCE IMAGING, COMPUTED TOMOGRAPHY [CT] SCAN, OR RESPIRATORY THERAPY). • NUMBER OF NONPHYSICIAN HEALTH CARE PROVIDERS (SUCH AS PHYSICAL THERAPISTS, OCCUPATIONAL THERAPISTS, NURSE PRACTITIONERS, PODIATRISTS, OR OPTOMETRISTS) BY TYPE. • MEDICAL EVACUATION/CASUALTY TRANSPORT SYSTEMS (PUBLIC, PRIVATE, AND MILITARY GROUND AND AIR AMBULANCES). • NUMBER OF DENTAL PROVIDERS AND TYPES OF DENTAL CARE AVAILABLE (SUCH AS EMERGENCY AND ESSENTIAL CARE AND/OR ORAL SURGERY). • NUMBER OF MH CLINICS AND AVAILABLE SERVICES. • NUMBER AND TYPES OF MH PERSONNEL (SUCH AS PSYCHOLOGISTS, SOCIAL WORKERS, AND THE LIKE). • NUMBER AND TYPES OF MEDICAL RESEARCH FACILITIES. • VETERINARY MEDICINE PERSONNEL, FACILITIES, AND CAPABILITIES. • PHARMACEUTICAL MANUFACTURING. • AVAILABILITY AND TYPES OF MEDICAL EQUIPMENT, MEDICAL EQUIPMENT REPAIR, AND MEDICAL SUPPLIES. • AVAILABILITY, COLLECTION CAPABILITIES, AND QUALITY OF BLOOD AND BLOOD PRODUCTS. • AVAILABILITY, QUALITY, AND PRODUCTION CAPABILITY OF MEDICINAL GASES. • OPTICAL FABRICATION CAPABILITIES. • NUMBER, TYPES, AND CAPABILITIES OF MEDICAL LABORATORIES. • NAMES AND TITLES OF KEY PERSONNEL WITHIN THE PUBLIC AND PRIVATE HEALTH CARE INFRASTRUCTURES. • NUMBER, TYPES, AND LOCATION OF MEDICAL SCHOOLS OR MEDICAL TRAINING CENTERS. • DETERMINE THE LEADING CAUSES OF DEATH OF THE GENERAL POPULATION OR SPECIFIED SUBPOPULATIONS. • DETERMINE THE PREVALENCE OF ENDEMIC AND EPIDEMIC DISEASES IN THE AO. • DETERMINE THE PREVALENCE OF HUMAN IMMUNODEFICIENCY VIRUS (HIV)/ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). • DETERMINE THE ENVIRONMENTAL HEALTH RISK (TO INCLUDE HEAT AND COLD INJURY, EXPOSURE TO TIMS, AND POISONOUS OR TOXIC FLORA AND FAUNA). • NUTRITIONAL STATUS OF THE GENERAL POPULATION OR SPECIFIED SUBPOPULATIONS. • DETERMINE IMMUNIZATION LEVEL OF GENERAL POPULATION OR SPECIFIED SUBPOPULATIONS.

Table B-3. Checklist for the Assessment of a Foreign Medical Treatment Facility

MEDICAL TREATMENT FACILITY CHECKLIST

- IS THE MEDICAL FACILITY A PRIVATE, PUBLIC, OR MILITARY INSTITUTION?
 - IS THE MEDICAL FACILITY A HOSPITAL, CLINIC (SUCH AS OUTPATIENT, EMERGENCY, OR SUBSTANCE ABUSE), DOCTOR'S OFFICE, LONG-TERM/REHABILITATIVE CARE FACILITY?
 - WHERE IS THE FACILITY LOCATED? HOW ACCESSIBLE IS IT (SUCH AS ON A MAJOR THOROUGHFARE, ON SIDE STREETS OR ACCESSIBLE BY AIR)?
 - WHAT TYPE OF CARE DOES THE FACILITY PROVIDE (SUCH AS EMERGENCY AND GENERAL MEDICINE, SURGICAL, ORTHOPEDIC, MATERNITY/OBSTETRICS, PEDIATRIC, PSYCHIATRIC, REHABILITATIVE, OR LONG-TERM CARE)?
 - WHAT ARE THE NUMBER AND TYPES OF BEDS (SUCH AS SURGICAL, INTENSIVE CARE, OR GENERAL MEDICINE)?
 - WHAT ANCILLARY SERVICES ARE AVAILABLE (SUCH AS PT, OT, RESPIRATORY THERAPY, DIAGNOSTIC X-RAY, NUCLEAR MEDICINE, OR DIAGNOSTIC LABORATORY SERVICES)?
 - WHAT IS THE STAFFING LEVEL OF THE FACILITY?
 - DOES THE FACILITY PROVIDE OUTPATIENT SERVICES? IF SO, WHAT TYPES OF CARE?
 - WHAT IS THE STANDARD OF CARE PROVIDED AT THE FACILITY? HOW DOES IT COMPARE TO US FACILITIES?
 - HOW ARE MEDICAL PROFESSIONALS CREDENTIALLED? WHAT IS THEIR SCOPE OF PRACTICE?
 - WHAT IS THE NOSOCOMIAL INFECTION DISEASE RATE FOR THE FACILITY?
 - DOES THE FACILITY HAVE THE CAPABILITY TO ISOLATE INFECTIOUS DISEASE PATIENTS?
 - WHAT IS THE PATIENT ACCIDENT/INJURY RATE FOR THE FACILITY (SUCH AS FALLING OUT OF BED, INJURY CAUSED BY FAULTY EQUIPMENT, OR THE LIKE)?
 - WHAT TYPES OF MEDICAL EQUIPMENT ARE AVAILABLE IN THE FACILITY (SUCH AS DIAGNOSTIC [CT SCAN OR MAGNETIC RESONANCE IMAGING], REHABILITATIVE, OR PATIENT CARE [VENTILATORS, RESPIRATORS, OR ORTHOPEDIC])?
 - WHAT TYPES OF SUPPORT SERVICES ARE AVAILABLE (SUCH AS LAUNDRY, HOUSEKEEPING, OR FOOD SERVICE)? ARE THERE SHARED SERVICES WITH ANOTHER FACILITY? IF NOT, HOW ARE PATIENTS FED (SUCH AS BY RELATIVES)?
 - DOES THE FACILITY HAVE AN EMERGENCY ROOM? IS IT STAFFED AND EQUIPPED TO PROVIDE TRAUMA CARE?
 - WHAT IS THE CAPACITY OF THE FACILITY TO RESPOND TO A MASS CASUALTY SITUATION (RESULTING FROM UO, TERRORIST INCIDENTS, MAN-MADE OR NATURAL DISASTERS, OR EMPLOYMENT OF NBC WEAPONS)?
 - WHAT IS THE LEVEL OF MEDICAL SUPPLIES MAINTAINED WITHIN THE FACILITY (DAYS OF SUPPLY)?
 - HOW IS THE FACILITY RESUPPLIED WITH EXPENDABLE AND NONEXPENDABLE MEDICAL SUPPLIES? ARE MEDICINES READILY AVAILABLE OR MUST THEY BE OBTAINED ON AN INDIVIDUAL CASE BASIS? IS LOCAL VEGETATION COLLECTED AND USED FOR MEDICINAL PURPOSES?
 - DOES THE FACILITY HAVE THE CAPABILITY TO COLLECT, TEST, AND STORE BLOOD? WHAT DISEASES IS THE BLOOD TESTED FOR?
 - IF THE FACILITY CAN NOT COLLECT AND TEST BLOOD, WHERE DO BLOOD AND BLOOD PRODUCTS COME FROM? HAS IT BEEN TESTED? DOES THE FACILITY HAVE A REFRIGERATED STORAGE CAPABILITY? WHAT IS THE MAXIMUM NUMBER OF UNITS OF BLOOD WHICH CAN BE STORED?
 - DOES THE FACILITY HAVE ITS OWN AMBULANCES (NUMBER AND TYPE [AIR AND GROUND]) OR IS THIS A SERVICE WHICH IS PROVIDED BY ANOTHER AGENCY/BUSINESS?
 - IS THE HOSPITAL ACCREDITED BY ITS PARENT NATION AND/OR HOSPITAL ORGANIZATION (SUCH AS IN THE US BY THE JOINT COMMISSION ON THE ACCREDITATION OF HOSPITAL ORGANIZATIONS [JCAHO])?
 - DOES THE FACILITY PERFORM ITS OWN MEDICAL EQUIPMENT MAINTENANCE OR MUST BE IT SENT OUT FOR REPAIR?
-

Table B-3. Checklist for the Assessment of a Foreign Medical Treatment Facility (Continued)

MEDICAL TREATMENT FACILITY CHECKLIST
• DOES THE FACILITY HAVE DEPENDABLE ELECTRIC SERVICE? DOES IT HAVE A BACKUP GENERATOR FOR POWER OUTAGES? • DOES THE FACILITY HAVE RUNNING WATER? IF NOT, FROM WHAT SOURCE DOES THE STAFF OBTAIN WATER? IS IT POTABLE OR DOES IT NEED TO BE TREATED BEFORE USE? • DOES THE FACILITY HAVE AN OPERATIONAL ENVIRONMENTAL CONTROL SYSTEM? HEAT? AIR CONDITIONING? • WHAT SANITATION FACILITIES ARE AVAILABLE IN THE FACILITY? RESTROOMS FOR PATIENTS AND STAFF? BATHTUBS/SHOWERS FOR PATIENTS? HAND WASHING STATIONS/CAPABILITIES IN PCAS? DISPOSAL CAPABILITIES FOR GENERAL, MEDICAL, AND HUMAN WASTE? DISPOSAL CAPABILITIES FOR WASTE WATER? • DOES THE FACILITY HAVE A PEST MANAGEMENT PROBLEM (RATS, ANTS, FLIES, LICE, AND/OR OTHER ANIMALS AND INSECTS)? • OTHER. ANY OTHER ISSUES, CONCERNS, OR SITUATIONS WHICH AFFECT THE SPECIFIC FACILITY BEING EVALUATED.

(d) Analysis of medical evacuation services. *(This includes analysis of local medical evacuation services and capabilities; coordination and synchronization of local evacuation services/resources to redirect civilian patients; availability of and quality of local MTFs; and, impact of military operations on local evacuation services.)*

(e) Affects of disease and other OEH threats. *(This category includes the identification of disease and OEH threats that affect friendly forces and the delivery of HSS; identification of PVNTMED measures which are required to counter the medical threat; analysis of the affect of PVNTMED measures on friendly forces; analysis of the impact that disease and environmental threats have on enemy actions; and, the identification of additional disease and environmental health hazards which may be created and/or aggravated by military operations.)*

(6) Analysis of services provided by NGOs and other international organizations.

c. *Threat Integration and Information Consolidation. (The object of threat integration is to relate how essential elements of information [EEI] identified in Phase I and II of the MIPB process will affect the health of the command, the employment of HSS resources, as well as enemy/friendly COAs as they pertain to HSS issues. Further, information that is gathered relating to resources and background information, should be consolidated in a usable format for use as the need arises. Some useful formats for managing information and medical intelligence include overlays, spreadsheets, matrices, and databases.)*

(1) Threat integration can be broken down into three major categories. It is important to note that in each category the threat relates only to the health of the command or HSS issues. Similarly, the type of threat can vary greatly with the type of mission or operation (offensive, defensive, stability operations, and support operations). These categories are—

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- Friendly COAs. *(What friendly COAs are best supported from a HSS standpoint? What friendly HSS COAs best support the mission?)*

- Enemy COAs. *(What probable enemy COAs could affect friendly HSS units/resources/services?)*

- Geographic-related threat issues. *(This category includes climatic/weather-related threats and their impact on the need for and delivery of HSS and terrain-related issues that can best be depicted by creating a modified combined obstacle overlay.)*

(2) Consolidation of additional elements of medical information/intelligence into formats that are user friendly and available for future planning or other possible contingencies. Databases are particularly useful for managing general information.

APPENDIX C

PHASES OF PATIENT CARE AND TREATMENT

C-1. Introduction

a. This appendix provides a description of the phases of patient treatment within the HSS system. It describes and defines the skills and training required to provide medical treatment to patients from the point of injury, through successive levels of care, to the CONUS-support base.

b. *Essential care* is medical treatment and care within the TO and which is METT-TC dependent. It includes, first response, resuscitative care, and en route care, as well as care to either return the patient to duty within the theater evacuation policy, or to begin initial treatment required for optimization of outcome, and/or to ensure the patient can tolerate further evacuation.

- *First response care* is the initial essential stabilizing first aid and/or medical care rendered to ill or injured casualties at the point of initial illness or injury.

- *Resuscitative care* the aggressive management of life-, limb-, and eyesight-threatening injuries as they are identified. Interventions include protection/securing of the airway, ventilation and oxygenation, hemorrhage control, vigorous shock therapy, and protection from hypothermia.

- *En route care* is the care required to maintain phased treatment initiated prior to evacuation and sustainment of the patient's medical condition during evacuation.

This paragraph is in consonance with QAP 82.

C-2. Emergency Medical Treatment (Trauma Specialist Care)

a. Emergency medical treatment, also referred to as care provided by the trauma specialist, is the first medical treatment that a sick, injured, or wounded soldier receives from a soldier who holds a medical MOS. Any emergency or lifesaving measures required prior to EMT must be performed by a soldier trained in first aid (self-aid/buddy aid) or enhanced first aid (CLS). Trauma specialist care entails the skillful application of examining techniques; performing emergency or lifesaving measures; and continuing observation and care to ensure that the airway remains open, that bleeding has been controlled, and that shock, infection, and further injury are prevented. It involves the effective use of medical supplies not available to the nonmedical soldier and arrangement for evacuation by dedicated medical ground or air evacuation resources, as appropriate.

NOTE

First aid (self-aid/buddy aid) and enhanced first aid (CLS) are the emergency or lifesaving care given to a sick, injured, or wounded persons when a medical MOS-trained soldier (trauma specialist) is not available. Every soldier is trained in applying lifesaving first aid

measures. First aid is administered until the casualty can be treated by medically-trained personnel (trauma specialist, PA, or physician). Lifesaving measures are applied to maintain breathing and circulation, to control bleeding, and to prevent shock and infection. These procedures include first aid for agent casualties with particular emphasis on lifesaving tasks. First aid also entails—

1. The application of measures to prevent a casualty's condition from deteriorating.
2. The use of proper methods in moving a casualty to a relatively safe point to await evacuation and care by medically-trained personnel. (Refer to FM 8-10-6 and FM 21-11 [4-25.11].)

b. Emergency medical treatment focuses on the initial stabilization of the patient and is initiated by medically trained (MOS-specific) personnel as far forward as feasible and as soon after wounding or onset of illness as feasible. Emergency medical treatment is within the capability of Level I care. This type of care includes—

- Maintenance of patient airway.
- Maintenance of circulation (stop the bleeding).
- Prevention of shock through vascular volume replacement (with IV fluids).
- Relief of pain.
- Application of dressings and splints (stabilize fractures).
- Protection from the elements.

C-3. Advanced Trauma Management

The ATM or initial resuscitation and stabilization treatment phase is distinguished by the application of clinical judgment and skill of physicians or PAs at Levels I and II MTFs. The physician and PA at the BAS provide this care. At Level II, the medical company treatment teams are supported by a staff, basic laboratory and x-ray capabilities, broad range of medicinal drugs, equipment and supplies, IV fluids, packed RBCs (liquid), and a short-term holding capability where the necessary examinations, observations, and treatment can be accomplished in a deliberate manner. For those patients who must be evacuated for a more comprehensive, long-term scope of treatment, arrangements are made for evacuation by ground or air to a corps hospital where the patient is treated and returned to duty or further stabilized for evacuation from the theater depending upon the theater evacuation policy.

C-4. Forward Resuscitative Surgery

a. The forward resuscitative surgery or stabilization treatment phase is for patients whose conditions require—

- Preoperative diagnostic procedures.
- Immediate preparation for surgery.
- Presence of an FST capability.
- Capability to administer general anesthesia.
- Provision for an adequately-equipped OR.
- Adequate postoperative recovery care environment.

b. The objective of this phase of treatment is to perform those emergency (urgent) surgical procedures without which death or loss of eyesight, limb, or body function is inevitable.

C-5. Theater Hospitalization Phase

The theater hospitalization phase provides essential care (paragraph C-1*b*) in theater. It embraces those endeavors that complete the recovery of the patient who can RTD within the stated theater evacuation policy or prepares the patient for further evacuation the CONUS-support base rehabilitative and convalescent care. Consultative telemedicine from the CONUS-support base is provided for those medical specialties not available within the theater.

C-6. Convalescent Care

a. The convalescent care phase of HSS entails guiding the patient from the acute phase of treatment, through recovery and rehabilitation to the level of self-sufficiency. This phase involves clinical judgment as to the proper time for the patient to move to successively more intense reconditioning (in order that he is not challenged beyond the capabilities of his strength). Convalescent care is provided at Level V hospitals.

b. The phases of patient care and treatment addressed in paragraphs C-2 through C-5 are in relation to combat wounds and injuries. The philosophy expressed also applies to patients who suffer from DNBI; however, the manner of providing treatment for disease-related conditions is somewhat different. For relatively minor conditions, virtually all of the phases can be accomplished at the lower operational levels. Deviations in the patient care and treatment phases may take place due to conditions beyond the control of the theater HSS system.

c. Restorative treatment and rehabilitative treatment are normally not available in the theater. The medical assets to achieve this type of care are in the CONUS-support base.

C-7. Definitive Care

That care which returns an ill or injured soldier to full function, or the best possible function after a debilitating illness or injury. Definitive care can range from self aid when a soldier applies a dressing, to a grazing bullet wound that heals without further intervention, to two weeks bed rest in theater for dengue fever, to multiple surgeries and full rehabilitation with a prosthesis at a CONUS medical center (MEDCEN) or VA hospital after a traumatic amputation. Doctrinally, definitive care is delivered at the lowest possible level. Definitive care is not a phase of patient treatment.

APPENDIX D

RISK MANAGEMENT

D-1. General

a. Risk management is the thought process of making operations safer without compromising the mission. Commanders must continually perform a risk assessment of the conditions under which they operate to prevent the unnecessary loss of personnel or equipment and the degradation of mission success.

b. Within the AMEDD, risk management techniques are applied in patient treatment, medical unit administrative and logistical support operations, and force protection operations, and in all HSS operations (to include operations conducted in an NBC environment).

c. This appendix provides an overview of risk management; HSS commanders and planners must institutionalize the risk management thought process, so that they can apply it automatically as they plan and execute missions. Risk management is a continuous process. As scenarios change, new or modified risks are identified and, therefore, continual assessment is required (Figure D-1). Changes or adjustments to current or future operations may be required to mitigate the adverse impact of identified risks and to ensure mission accomplishment.

d. For additional information on the risk management process refer to FM 100-14.

D-2. Risk Management

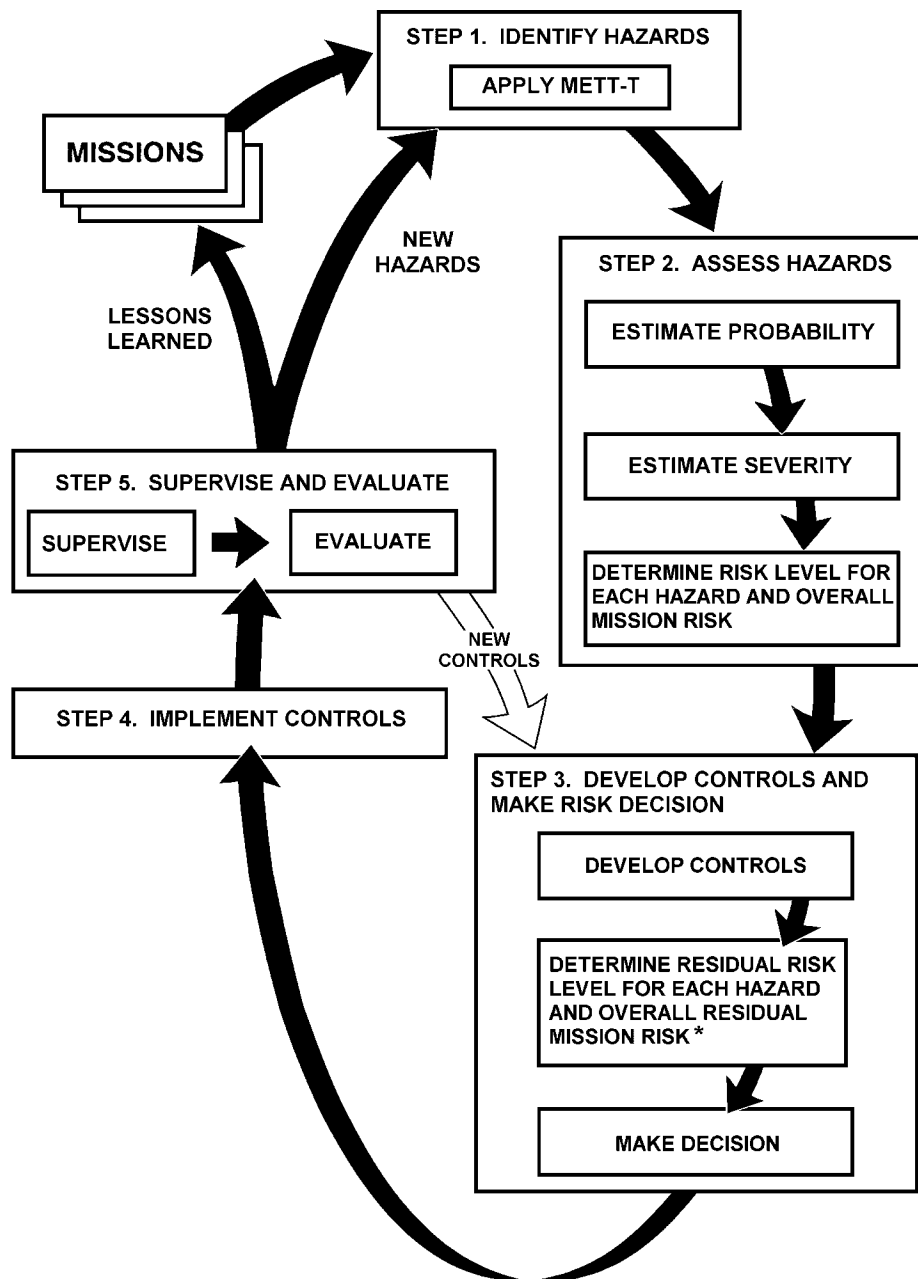
a. One of the critical tasks for all operations is to minimize risk. Every military plan must make this a priority. It is an inherent part of every mission and a basic responsibility of commanders. Commanders must issue clear risk guidance. Minimizing risk—eliminating unnecessary risk—is the responsibility of everyone in the chain of command. This responsibility begins with the highest commander, is continued through his subordinate leaders, and down to the individual soldier.

b. Risk management is a five-step approach for ensuring that operations and mission accomplishment are not compromised by hazards and accidents.

c. The five steps of risk management are—

(1) *Identify hazards.* Identify the most probable hazards for the mission. Hazards are conditions with the potential of causing injury to personnel, damage to equipment, loss of material, or lessening the ability to perform a task or mission. The most probable hazards are those created by readiness shortcomings in the operational environment. When a list of frequently recurring hazards is applied to a specified task or mission, the most probable hazards can be identified.

(2) *Assess hazards.* Once the most probable hazards are identified, analyze each to determine the probability of its causing an accident and the probable effect of the accident. Also, identify control options to eliminate or reduce the hazard. A tool to use in this assessment is the Army standard risk assessment matrix (Figure D-2). Tables D-1 through D-3 define the terms used in the risk assessment matrix. (Table D-1 provides information on hazard probability. Table D-2 provides information on hazard severity. Table D-3 discusses the levels of risk.)



* AS CONTROLS FOR HAZARDS ARE IDENTIFIED AND SELECTED THE HAZARDS ARE REASSESSED AS IN STEP 2

Figure D-1. Risk management process.

RISK ASSESSMENT MATRIX						
		PROBABILITY				
SEVERITY		FREQUENT A	LIKELY B	OCCASIONAL C	SELDOM D	UNLIKELY E
CATASTROPHIC	I	E	E	H	H	M
CRITICAL	II	E	H	H	M	L
MARGINAL	III	H	M	M	L	L
NEGLIGIBLE	IV	M	L	L	L	L
E — EXTREMELY HIGH RISK H — HIGH RISK M — MODERATE RISK L — LOW RISK						

Figure D-2. Army standard risk assessment matrix.

(3) *Make risk decisions.* Weigh the risk against the benefits of performing the operation. Accept no unnecessary risks and make any residual risk decisions at the proper level of command.

(4) *Implement controls.* Integrate specific controls into plans, orders, TSOPs, and rehearsals. Communicate controls down to the individual soldier.

(5) *Supervise.* Determine the effectiveness of controls in reducing the probability and effect of identified hazards. Ensure that risk control measures are performing as expected. Include follow-up reviews during and after actions to ensure all went according to plan, reevaluating or adjusting the plan as required, and developing lessons learned.

Table D-1. Probability of Hazards

FREQUENT (A) OCCURS VERY OFTEN, CONTINUOUSLY EXPERIENCED	
SINGLE ITEM	OCCURS VERY OFTEN IN SERVICE LIFE. EXPECTED TO OCCUR SEVERAL TIMES OVER DURATION OF A SPECIFIC MISSION OR OPERATION. ALWAYS OCCURS.
FLEET OR INVENTORY OF ITEMS	OCCURS CONTINUOUSLY DURING A SPECIFIC MISSION OR OPERATION, OR OVER A SERVICE LIFE.
INDIVIDUAL SOLDIER	OCCURS VERY OFTEN IN CAREER. EXPECTED TO OCCUR SEVERAL TIMES DURING MISSION OR OPERATION. ALWAYS OCCURS.
ALL SOLDIERS EXPOSED	OCCURS CONTINUOUSLY DURING A SPECIFIC MISSION OR OPERATION.
LIKELY (B) OCCURS SEVERAL TIMES	
SINGLE ITEM	OCCURS SEVERAL TIMES IN SERVICE LIFE. EXPECTED TO OCCUR DURING A SPECIFIC MISSION OR OPERATION.
FLEET OR INVENTORY OF ITEMS	OCCURS AT A HIGH RATE, BUT EXPERIENCED INTERMITTENTLY (REGULAR INTERVALS, GENERALLY OFTEN).
INDIVIDUAL SOLDIER	OCCURS SEVERAL TIMES IN CAREER. EXPECTED TO OCCUR DURING A SPECIFIC MISSION OR OPERATION.
ALL SOLDIERS EXPOSED	OCCURS AT A HIGH RATE, BUT EXPERIENCED INTERMITTENTLY.
OCCASIONAL (C) OCCURS SPORADICALLY	
SINGLE ITEM	OCCURS SOME TIME IN SERVICE LIFE. MAY OCCUR ABOUT AS OFTEN AS NOT DURING A SPECIFIC MISSION OR OPERATION.
FLEET OR INVENTORY OF ITEMS	OCCURS SEVERAL TIMES IN SERVICE LIFE.
INDIVIDUAL SOLDIER	OCCURS SOME TIME IN A CAREER. MAY OCCUR DURING A SPECIFIC MISSION OR OPERATION, BUT NOT OFTEN.
ALL SOLDIERS EXPOSED	OCCURS SPORADICALLY (IRREGULARLY, SPARSELY, OR SOMETIMES).
SELDOM (D) REMOTELY POSSIBLE; COULD OCCUR AT SOME TIME	
SINGLE ITEM	OCCURS IN SERVICE LIFE, BUT ONLY REMOTELY POSSIBLE. NOT EXPECTED TO OCCUR DURING A SPECIFIC MISSION OR OPERATION.
FLEET OR INVENTORY OF ITEMS	OCCURS AS ISOLATED INCIDENTS. POSSIBLE TO OCCUR SOME TIME IN SERVICE LIFE, BUT RARELY. USUALLY DOES NOT OCCUR.
INDIVIDUAL SOLDIER	OCCURS AS ISOLATED INCIDENT DURING A CAREER. REMOTELY POSSIBLE, BUT NOT EXPECTED TO OCCUR DURING A SPECIFIC MISSION OR OPERATION.
ALL SOLDIERS EXPOSED	OCCURS RARELY WITHIN EXPOSED POPULATION AS ISOLATED INCIDENTS.
UNLIKELY (E) CAN ASSUME WILL NOT OCCUR, BUT NOT IMPOSSIBLE	
SINGLE ITEM	OCCURRENCE NOT IMPOSSIBLE, BUT CAN ASSUME WILL ALMOST NEVER OCCUR IN SERVICE LIFE. CAN ASSUME WILL NOT OCCUR DURING A SPECIFIC MISSION OR OPERATION.
FLEET OR INVENTORY OF ITEMS	OCCURS RARELY (ALMOST NEVER OR IMPROBABLE). INCIDENTS MAY OCCUR OVER SERVICE LIFE.
INDIVIDUAL SOLDIER	OCCURRENCE NOT IMPOSSIBLE, BUT MAY ASSUME WILL ALMOST NOT OCCUR IN CAREER OR DURING A SPECIFIC MISSION OR OPERATION.
ALL SOLDIERS EXPOSED	OCCURS VERY RARELY, BUT NOT IMPOSSIBLE.

Table D-2. Severity of Hazards

CATASTROPHIC (I)	LOSS OF ABILITY TO ACCOMPLISH THE MISSION OR MISSION FAILURE. DEATH OR PERMANENT TOTAL DISABILITY (ACCIDENT RISK). LOSS OF MAJOR OR MISSION-CRITICAL SYSTEM OR EQUIPMENT. MAJOR PROPERTY (FACILITY) DAMAGE. SEVERE ENVIRONMENTAL DAMAGE. MISSION-CRITICAL SECURITY FAILURE. UNACCEPTABLE COLLATERAL DAMAGE.
CRITICAL (II)	SIGNIFICANTLY (SEVERELY) DEGRADED MISSION CAPABILITY OR UNIT READINESS. PERMANENT PARTIAL DISABILITY, TEMPORARY TOTAL DISABILITY EXCEEDING 3 MONTHS TIME (ACCIDENT RISK). EXTENSIVE (MAJOR) DAMAGE TO EQUIPMENT OR SYSTEMS. SIGNIFICANT DAMAGE TO PROPERTY OR ENVIRONMENT. SECURITY FAILURE. SIGNIFICANT COLLATERAL DAMAGE.
MARGINAL (III)	DEGRADED MISSION CAPABILITY OR UNIT READINESS. MINOR DAMAGE TO EQUIPMENT OR SYSTEMS, PROPERTY, OR THE ENVIRONMENT. LOST DAY DUE TO INJURY OR ILLNESS NOT EXCEEDING 3 MONTHS (ACCIDENT RISK). MINOR DAMAGE TO PROPERTY OR THE ENVIRONMENT.
NEGLIGIBLE (IV)	LITTLE OR NO ADVERSE IMPACT ON MISSION CAPABILITY. FIRST AID OR MINOR MEDICAL TREATMENT (ACCIDENT RISK). SLIGHT EQUIPMENT OR SYSTEM DAMAGE, BUT FULLY FUNCTIONAL AND SERVICEABLE. LITTLE OR NO PROPERTY OR ENVIRONMENTAL DAMAGE.

Table D-3. Levels of Risk

EXTREMELY HIGH RISK	LOSS OF ABILITY TO ACCOMPLISH THE MISSION IF HAZARDS OCCUR DURING MISSION. A FREQUENT OR LIKELY OF CATASTROPHIC LOSS OR FREQUENT PROBABILITY OF CRITICAL LOSS EXISTS.
HIGH RISK	SIGNIFICANT DEGRADATION OF MISSION CAPABILITIES IN TERMS OF THE REQUIRED MISSION STANDARD, INABILITY TO ACCOMPLISH ALL PARTS OF THE MISSION, OR INABILITY TO COMPLETE THE MISSION TO STANDARD IF HAZARDS OCCUR DURING MISSION. OCCASIONAL TO SELDOM PROBABILITY OF CATASTROPHIC LOSS EXISTS. A LIKELY TO OCCASIONAL PROBABILITY EXISTS OF A CRITICAL LOSS OCCURRING. FREQUENT PROBABILITY OF MARGINAL LOSSES EXIST.
MODERATE RISK	EXPECTED DEGRADED MISSION CAPABILITIES IN TERMS OF THE REQUIRED MISSION STANDARD WILL HAVE A REDUCED MISSION CAPABILITY IF HAZARDS OCCUR DURING MISSION. AN UNLIKELY PROBABILITY OF CATASTROPHIC LOSS EXISTS. MARGINAL LOSSES OCCUR WITH A LIKELY OR OCCASIONAL PROBABILITY. A FREQUENT PROBABILITY OF NEGLIGIBLE LOSSES EXISTS.
LOW RISK	EXPECTED LOSSES HAVE LITTLE OR NO IMPACT ON ACCOMPLISHING THE MISSION. THE PROBABILITY OF CRITICAL LOSS IS UNLIKELY, WHILE THAT OF MARGINAL LOSS IS SELDOM OR UNLIKELY. THE PROBABILITY OF A NEGLIGIBLE LOSS IS LIKELY OR LESS.

D-3. Rules of Risk Management

The rules which guide the risk management process are—

- (1) Integrate risk management into planning.
- (2) Accept no unnecessary risks.

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- (3) Make risk decisions at the proper level.
- (4) Accept risk if benefits outweigh the cost.

D-4. Three-Tier Approach

The Army has established a three-tier approach to risk management.

- a.* The foundation tier is command level. This level is responsible for a safety plan, setting standards, training consistent with abilities of those being trained, providing resources, and making risk acceptance decisions.
- b.* The leader level is next. The leader places emphasis on adherence to standards, assesses and balances risks, and is the implementer of the safety controls to eliminate or control risks. Further, he teaches the individual soldier his responsibilities within the risk management process.
- c.* The individual level is last. The individual soldier must understand safety responsibilities, recognize unsafe conditions and acts, and perform duties to standard.

D-5. Factors to Consider in Risk Management

Some factors that might be considered in the risk management process are presented in this paragraph. This is not a complete listing of all factors that should be considered, but rather some of the more routine categories. Factors for each mission will be dependent upon the actual mission and METT-TC considerations.

- a. Level of Activity.* This can include both individual and unit activity. With regard to the individual, it can include the type of activity (such as heavy, physical labor or sedentary desk work) or the pace required (such as continuous work with few, if any, breaks). With regard to the level of unit activity, it can include the OPTEMPO (such as a mass casualty situation or the slower pace of running daily sick call) or the phase of the operation (such as setting up or disestablishing the unit area, reinforcing hasty defensive positions, or the unit standing down).
- b. Inherent Dangers of Equipment Used.* Inherent dangers of the equipment used by the unit can include the potential for accidents if the equipment is used improperly or if it is not working correctly. In medical units if the medical equipment is not correctly calibrated or is otherwise malfunctioning, it presents a danger not only to the operator but also to the patient (such as an improperly calibrated x-ray machine). Further, in the unit there is an abundance of medical and nonmedical equipment which could cause fires or explosions, resulting in collateral damage to personnel or equipment if the equipment malfunctioned. Further, nonmechanical equipment can result in injury to patients and/or care providers if it is not inspected, maintained, and repaired as required (such as litters and litter straps).
- c. Hazardous Materials Used or Produced.* In medical units, there are numerous hazardous materials that are used to perform unit functions (such as petroleum, oils and lubricants [POL] and solvents)

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or are produced as a by-product of the mission (medical waste). Units must ensure that hazardous materials are properly handled and disposed of to ensure that they do not create a hazard for medical personnel, patients, and the environment. This is of particular importance for medical units and the two types of medical waste—regulated and nonregulated. For a discussion of waste disposal refer to paragraph A-8c, and FM 4-02.10, FM 4-25.12, and FM 21-10.

d. Occupational and Environmental Concerns. Environmental concerns encompass a number of areas which must be considered by a medical unit. Extremes in temperature can cause heat/cold injuries to medical personnel and increase the patient workload. They may also complicate a patient's medical condition (for example: during mountain operations there may be a delay in medical evacuation due to the treacherous terrain. Medical personnel will have to sustain the patient for a longer period of time and may have to provide a field expedient shelter and warmth, to ensure the patient's medical condition is not complicated by hypothermia). Commanders must ensure that areas occupied by soldiers/units are free from industrial contamination, such as that found around chemical plants, petroleum storage areas, or iron foundries. Terrestrial elevations upon which operations are conducted can lead to mountain illness and increased numbers of crush (impact) injuries. Commanders must also consider the effect of the mission on the environment. Such effects can cause an imbalance in the ecosystem, which may lead to unhealthy conditions for soldiers and for indigenous and refugee populations. (Refer to FM 4-02.17 and FM 8-10-6 for additional information.)

e. Availability of Protective Equipment. This factor includes items common to all military units (such as fire extinguishers, mission-oriented protective posture [MOPP] gear, or ear plugs) as well as items that are primarily found in medical units (such as patient protective wraps and items used for universal protective measures). Medical units must consider the equipment available to the unit members as well as that required for the patients in their care. Clinical SOPs should contain information on procedures for ensuring patient safety from accidental injury and also from the hazards of tactical operations (such as preparing patient bunkers or sandbagging patient treatment areas).

f. Accident Frequency. The commander should focus on what types of accidents occur in the unit, their frequency, and areas in which they occur. If the frequency of accidents increases or if the accidents continue to occur in one operational area, it may be necessary to tighten control measures in these specific areas while instituting more generalized measures throughout the other operational areas.

g. Supervision. Supervision can serve as a control measure in areas where the frequency of accidents and/or other indications of hazards exist. The lack of supervision or inadequate supervision can result in an increase of hazards and accidents. The commander is challenged by the need to balance supervision to decrease hazards, but not stifle productivity.

h. Weather. Weather conditions can increase the hazards of accomplishing the HSS mission as they can make it difficult to accomplish tasks, increase the risk associated with operating equipment/vehicles/aircraft, or complicate a patient's medical condition (such as a patient with traumatic injuries who has also been exposed to extreme cold weather conditions may develop more profound shock). For example: weather which impacts adversely on the use of air ambulances results in increasing the patient load and the number of missions that are accomplished by ground ambulance. Adverse weather may also result in a BAS or Level II MTF having to hold patients longer than is normally required. This can result in

overcrowding the facility and rapidly depleting the stocks of medical supplies during a time when resupply may be difficult or impossible to accomplish.

i. *Operational Conditions.* These will vary with each mission. Units operating in remote locations or in underdeveloped areas have a higher potential of exposure to endemic and epidemic diseases (due in part to poor sanitation, contaminated drinking water, improper preparation and storage of food, and lack of immunizations and/or chemoprophylaxis against infectious diseases). Unimproved roads, rudimentary sanitation, and difficult terrain coupled with extremes in weather can create unique hazards.

j. *Condition of Personnel.* Soldiers who are well-conditioned physically, acclimated to the climate in the AO, and well-trained and motivated perform tasks to a higher standard than do soldiers who are not. Continuous operations or high noise levels in rest areas which restrict the amount of rest soldiers receive, strenuous activity in soldiers who are not acclimated to the climate, untrained, and unmotivated soldiers, and those who are not physically well-conditioned are some factors which can result in—

- More frequently occurring accidents.
- Job performance standards not being met.
- Preventive maintenance not being accomplished on unit equipment.

k. *Personnel/Organizational Proficiency.* Health service support personnel are normally well-trained within their medical specialties due to the length of training and the standards required to be met for award of their specialties. Many HSS personnel, however, are not as familiar with field duties as they are with those performed in tables of distribution and allowances (TDA) facilities. The commander must assess how familiar his soldiers are with the field medical equipment contained in their MESs and with the common soldier tasks they are required to perform in the field and take necessary actions to resolve deficiencies noted.

l. *Adequacy of Site.* The HSS commander must carefully evaluate the area assigned for the establishment of the MTF. Sufficient real estate must be allotted for establishing the MTF; providing an ambulance turnaround point and other traffic flow considerations; establishing an LZ; permitting augmentation of the HSS assets; providing a patient decontamination area; and, permitting the establishment of administrative and logistical areas, motor pools, and sleep areas. Trying to establish an MTF in too restrictive of an area can increase traffic jams, resulting in accidents and injuries to personnel. A restrictive terrain may not permit the safe positioning of hazardous equipment within the unit area. It could also disrupt the patient flow within the facility resulting in the degradation of medical care. For a discussion of site selection criteria refer to FM 4-02.4, FM 4-02.6, and FM 4-02.10.

m. *Level of Planning.* Planning is the key to mission success and the safe operation of the unit. Planning includes more than the planning required to support the tactical plan. Every phase of the operation requires detailed and continuous planning to ensure that deployment, mission execution, and redeployment are accomplished in the most efficient and safe manner possible. For example, if the unit field sanitation plan is not developed and executed, combat ineffectiveness can result from the spread of disease and contamination.

n. Complexity of Movement. When a unit is deploying or redeploying, a number of transportation means may be used to accomplish the move (such as by rail to a port of embarkation, by ship to the port of debarkation, or by convoy from the port of debarkation to the AO). Each of these modes of transportation have special requirements to ensure that the personnel, vehicles, and equipment are safely transported from one point to another. The commander must evaluate the plan for the move, assess the hazards it presents, and institute controls to ensure the move is accomplished in a safe manner. This same planning and hazard assessment is required for moves of much smaller scope such as when a Level II unit deploys a treatment team forward to augment a BAS using organic vehicles.

o. Adequacy of Directions Given. Leaders must always ensure that the directions they give are clear and concise and that the soldiers receiving the directions understand what they are expected to do. Accidents, substandard job performance, and mission failure can result if the personnel performing the tasks do not understand what they are to do, when they are to do it, and how they are to do it.

D-6. Occupational and Environmental Health Risk Assessment Process

a. Traditionally, deployment medical risk analysis and assessments have concentrated on the historically proven threats posed by infectious disease as a major cause of DNBI. However, recent indications are that the risks of exposure to chemical and physical hazards from environmental contamination are an increasingly important element of the medical threat, whether as the result of an accidental release, existing contamination, or a directed action by an adversary.

b. Occupational and environmental health hazards can adversely impact mission accomplishment. These hazards include exposures to harmful levels of environmental contaminants such as TIMs, radiation, or biological agents. “Harmful levels” include high-level exposures that result in immediate health effects and significant impacts to mission capabilities. Health hazards may also include low-level exposures that could result in delayed or long-term health effects that would not ordinarily have a significant impact on the mission. Commanders must use OEH surveillance to identify these hazards, assess the potential risks, determine appropriate risk control measures, and communicate these risks to their forces via the risk management process.

c. Risk management is a process for identifying, assessing, and controlling risks from operational hazards, including OEH hazards. Risk is determined by estimating the probability and severity of a potential adverse impact that may result from hazards due to the presence of an adversary or some other hazardous condition (such as environmental contamination). Risks range from low through extremely high. Leaders seek to mitigate risk by evaluating hazards and implementing risk management options during operational planning. When applied by medical personnel this process allows planners to include the assessment of the severity of hazards, characterize the risks in the context of the proposed operation, and then effectively communicate the risk assessments and appropriate PVNTMED control measures to the commander. Commanders then make informed decisions by balancing the OEH risks and other operational risks with mission requirements.

d. The matrix (Figure D-2) summarizes the risk management process. It is a qualitative tool, but the process of categorizing the health effects is largely quantitative. The quantitative parameters include,

but are not limited to: dose, exposure time, route of exposure (such as skin, inhalation, or ingestion), and comparisons to established acute and chronic toxic thresholds.

(1) *Hazard probability (horizontal-axis)*. The likelihood of a soldier encountering a hazard. Effective employment of mitigation strategies, such as personal protective equipment or avoidance, usually shifts the Hazard Probability to the right, thereby decreasing health risk.

(2) *Hazard severity (vertical-axis)*. A measure of the impact of the interaction of the hazard with the soldier, this relates biochemical and/or physiological side effects (short and long term) to health outcome.

(3) *Risk estimate*. The body of the matrix defines the risk estimate ranging from extremely high to low.

e. Occupational and environmental health risk assessments should include an evaluation of occupational health exposures from deployed operational tasks and ambient environmental health exposures: air, soil, potable and nonpotable waters, ionizing and non-ionizing radiological sources, vectorborne threats, and other physical hazards. Occupational and environmental health hazards may be present as contamination from historical site usage, battle damage, stored stockpiles, and adjacent commercial or residential sites. The OEH risk assessment requires initial and continued surveillance of the following criteria components:

(1) *Ambient air*. The assessment should monitor for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), pesticides, metals, radiation, total and respirable particulate matter, and combustion-related pollutants such as carbon monoxide, sulfur dioxide, ozone, and nitrogen oxides. Other contaminants may include: CW agents, military smokes and obscurants, riot control agents, and other TIMs expected to be present in the AO.

(2) *Soil*. The assessment should monitor for heavy metals, pesticides, herbicides, VOCs, SVOCs, explosives, and radiation. Additional samples should be collected following hazardous material, POL spills, and prior to closure of the site to document final conditions.

(3) *Water*. The assessment should include an evaluation for chemical, metal, biological, and radiological content of potable and nonpotable waters according to the DOD Tri-Service Field Water Guidance (Sanitary Control and Surveillance of Field Water Supplies, Technical Bulletin Medical [TB MED] 577). This criteria includes water-vulnerability assessments identifying difficulties in maintaining a potable water source, essential nonpotable water availability needs (such as sanitary and fire fighting) and vulnerability to sabotage or process upsets. This assessment also includes the identification and evaluation of proposed wastewater collection and treatment or disposal systems.

(4) *Radiological surveys*. The assessment should include an evaluation of the need to survey sites for background radiation, ionizing and non-ionizing radiation sources, and radiological contamination. If battle damage is present, perform a rapid hazard assessment for radiation sources and radioactive contamination.

(5) *Noise*. An environmental noise assessment should be performed if industrial or other noise-producing hazards exist.

(6) *Occupational health.* Assess occupational hazards and determine whether control measures are in place and adequate. Recommend appropriate PVNTMED measures, document occupational health exposures, and report results to immediate supervisors and commanders.

f. Specific record keeping and reporting requirements are set forth in JCS Memorandum MCM 0006-02.

APPENDIX E

INTEGRATED CONCEPT TEAM APPROACH

E-1. General

This appendix discusses the ICT approach to the FHPGE functional area alignment. In aligning with the three pillars described in JHSS Vision (healthy and fit force, casualty prevention, casualty care and management), overlap occurs in the preventive and curative aspects of some of the AMEDD functional areas (Chapter 5). This necessitates a regrouping of the functional areas as they pertain to the three pillars.

E-2. Integrated Concept Team Approach

a. The ICTs conducted by the Commander, USAMEDDC&S are panels of experienced AMEDD personnel who analyze existing systems and then determine the future concepts, organizations, and materiel required to move the AMEDD from its current state to support future Army operational concepts. The objectives of the ICTs are to—

- Develop concepts and define capabilities requirements.
- Determine modernization solutions across the doctrine, organizations, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) domains.
- Compliment and facilitate transition to Integrated Product Teams (IPTs).
- Shorten the requirements determination process.
- Preclude *dead end* requirements.
- Build consensus on major initiatives and issues facing the AMEDD.
- Leverage functional area expertise for model development.

b. The ICTs are grouped as: medical C4I; casualty care; medical evacuation; casualty prevention; and medical logistics.

E-3. Medical Command, Control, Computers, Communications, and Intelligence

The medical C4I ICT develops the transition C2 infrastructure to support AMEDD operations across full spectrum operations. It develops C4I functionality while considering the implications of C2 force structure changes based on technological, organizational, and resource modernization. This includes coordination throughout the USAMEDDC&S and the USAMRMC to facilitate requirements determination, reengineering, and realignment of automation with the AMEDD core business processes.

E-4. Casualty Care

Casualty care encompasses a number of AMEDD functional areas. It groups area medical support, hospitalization, the treatment elements of dental care and MH, clinical laboratory services, and the treatment of NBC-contaminated patients. All issues pertaining to the provision of clinical services on the battlefield are dealt with by this ICT. The team provides future concept and requirements recommendations for the full spectrum of deployed clinical care issues, including the trauma specialist, division HSS, and corps and EAC clinical operations. The preventative aspects of dentistry and COSC are addressed in casualty prevention (paragraph E-6).

E-5. Medical Evacuation

The medical evacuation ICT is charged with developing operational concepts and defining operations capabilities for medical evacuation by AMEDD resources. This ICT provides recommendations for platform modernization requirements, future capabilities determination based on evacuation modeling, and fielding rational for medical evacuation vehicle acquisition programs.

E-6. Casualty Prevention

Casualty prevention is the AMEDD's integrated and focused approach enabling the Army to promote and sustain a healthy and fit force and to prevent casualties from disease, nonbattle injuries, and combat operational stress reactions. The casualty prevention ICT addresses issues and needed capabilities in support of broad spectrum medical and OEH surveillance, NBC (to include TIMs), force protection initiatives, and PVNTMED support with respect to all phases of mobilization, deployment/redeployment, and demobilization. This ICT develops future concepts, modernization plans, and future operational capabilities for all casualty prevention areas (PVNTMED, veterinary, medical laboratory, dental, and COSC).

E-7. Medical Logistics

The medical logistics ICT develops future operational capabilities that provide enhanced medical logistics support including medical supply/resupply to the joint services, blood distribution, optical fabrication and repair, medical equipment maintenance and repair, and Class VIII situational understanding. The medical logistics ICT is charged with developing a holistic concept in support of the JHSS Vision. The ICT also addresses modernization plans, assesses technology-based initiatives, and provides recommendations to support materiel solutions leading to Milestone I decisions.

APPENDIX F

HEALTH SERVICE SUPPORT ASPECTS OF JOINT AND
MULTINATIONAL OPERATIONS AND DETERMINATION OF
ELIGIBILITY FOR CARE**Section I. PLANNING CONSIDERATIONS FOR JOINT OPERATIONS****F-1. Joint Operations**

a. Future operations will be joint in nature. United States Army HSS planners must anticipate this fact and plan accordingly. Specific doctrine for HSS in joint operations is contained in Joint Pubs 4-02, 4-02.1, and 4-02.2.

b. This checklist addresses some interagency and/or HN considerations. Section II provides a checklist for multinational operations. Section III provides an eligibility for medical care matrix.

F-2. Health Service Support Planning Checklist for Joint Operations

a. *General Planning Considerations.*

(1) What C2 infrastructure will be established for the operation? *(Is a JTF established? Will specific US Army HSS assets be assigned/attached to another Service? Will an ASCC be established? Which Service component command surgeon has been designated as the JTF surgeon? Does the JFS have a planning staff designated?)*

(2) What is the nature of the operation and its anticipated duration? *(What type of operation is being conducted? Combat? Peacekeeping? FHA? Will it be short-term in nature [such as a raid or a strike]? Will it be a long-term commitment of forces [such as in peacekeeping operations or support to an insurgency]?)*

(3) What is the anticipated level of violence to be encountered? *(Are the operations being conducted? Combat? Stability operations? Support operations? What is the potential for terrorist attacks/incidents? Is it anticipated that NBC weapons will be employed?)*

(4) What are the capabilities of all Service component HSS assets in theater? *(The specific capabilities of all HSS assets within theater must be determined to ensure that a duplication of services does not exist and that the use of scarce resources is maximized. Specific considerations are contained within the functional area discussions.)*

(5) Are communications systems and automation equipment interoperable? *(Do all C2 headquarters have interoperability of communications equipment? If not, how will this be corrected? Are liaison officers and/or teams required? Can automated reports be transmitted to all Services? If not, can reports be completed and transmitted manually?)*

(6) What are the rules of engagement (ROE)? (How do the ROE impact HSS operations?

NOTE: There are no medical rules of engagement; this is a misnomer. The term ROE refers to constraints on the use of force. Some commands use the term medical rules of eligibility [MROE] to delineate the determination of eligible beneficiaries for care in US military MTFs. For a discussion on eligibility determinations see Section III below.)

(7) What are the security requirements and force protection measures for HSS activities?

(Are ground ambulances or other medical vehicles required to move in convoys rather than individually? Do medical evacuation aircraft require armed escort to perform their missions? Has the risk management process been used to determine force protection requirements?)

(8) Is the contracting for HNS feasible for medical activities? (Can HNS be used for the

support of housekeeping, food service, or other administrative requirements for deployed hospitals? NOTE: Due to stringent federal requirements for the standards of pharmaceuticals and the provision of medical care, contracting is normally restricted to nonmedical functions.)

b. Preventive Medicine and the Medical Threat.

(1) Do all Services have PVNTMED assets deployed in the theater? (If no, which Service

will provide PVNTMED support on an area support basis? Will augmentation be required to accomplish the mission?)

(2) What is the medical threat in the AO? (What are the endemic and epidemic diseases in

the AO? Are disease outbreaks seasonally related? Have any of the Services previously conducted extended operations in the AO? How is medical intelligence obtained for the joint force? What are the OEH hazards faced by the joint force [to include TIMs]? Are there hazardous flora and fauna in the AO?)

(3) Have site surveys been conducted for areas to be inhabited by US forces? (Are the

individual Services responsible for providing this function in their individual areas? Will this function be performed for the joint force by one specific Service? Were any areas determined to be hazardous [such as sewage runoff, fly or other arthropod infestation, or soil contaminated by TIMs]? Can adverse environmental conditions be corrected? Is selection of another site required? Was the site previously used by other forces? Are sanitation facilities adequate? Are the methods of human waste disposal in compliance with applicable environmental laws/policies of the US and HN [such as chemical toilets and individual waste collection bags]?)

(4) Is it anticipated that refugee, internally displaced persons (IDP), retained/detained

persons, and/or EPW operations will be required? (Are sufficient PVNTMED assets deployed in theater to support these types of operations without adversely impacting the delivery of health care to US forces? Is augmentation required? Are sufficient sanitation facilities available to support the refugee, IDP, retained/detained persons, and EPW populations? Is sanitation maintained on public food service facilities? Are water supplies adequate and potable?)

(5) Do units have field hygiene and sanitation supplies and equipment on hand? (Do all the

Services have adequate field hygiene and sanitation supplies and equipment on hand? Are teams [such as the unit field sanitation team] trained to apply PVNTMED measures to counter the medical threat?)

(6) How will medical waste be collected and disposed of? *(Does a command policy exist on the collection, handling, and disposition of medical waste?)*

(7) Do service members have personal protective supplies and equipment available and/or issued? *(Are sunscreen, sunglasses, insect repellent, bed nets, or other personal protective supplies/equipment on hand or available for issue?)*

(8) If continuous operations are anticipated, have work/rest schedules (sleep plans) been developed and implemented when appropriate? *(Continuous operations without adequate amounts of sleep can lead to serious performance degradation [such as faulty decision making or lowering resistance to diseases].)*

(9) Is a command policy established and disseminated on water discipline? *(In operations conducted in hotter climates, extreme cold weather, or in MOPP equipment, command emphasis must be given to a water discipline program to ensure heat injuries are minimized. NOTE: Dehydration can occur in extreme cold weather operations as well as in operations conducted in hotter climates.)*

c. *Medical Treatment (Area Support).*

(1) What units will provide Level I and Level II medical care? *(Do all Service components have organic assets to provide Levels I and II medical care? What units do not have organic HSS and must receive Levels I and II medical care on an area support basis? Will units providing this support require augmentation to accomplish the mission?)*

(2) Will troop clinics/dispensaries be established in areas of troop concentrations? *(Which Service will provide this service? What will the operating hours be? Where do service members go for emergency medical care after troop clinic hours are over? Is this information disseminated to the lowest possible level?)*

(3) Do any operations security (OPSEC) requirements exist which must be accommodated? *(Do special operations forces [SOF] units require Level II medical care on an area support basis? Do OPSEC requirements exist which impact on providing Level II HSS to SOF personnel?)*

d. *Hospitalization.*

(1) What hospital resources will be in the theater? *(Identify hospital units from all Service components within the theater. What is the ratio between medical beds and surgical beds? What ancillary services are provided within the theater [such as PT, OT, or other convalescence and rehabilitative services]? Are hospital units being phased into the theater as the operation progresses and the theater matures?)*

(2) What hospitals will be designated for the care of retained/detained persons and EPW? *(If significant numbers of retained/detained persons and EPW are anticipated, will a hospital or hospitals be designated only to receive these patients? If not, will all hospitals receive and treat retained/detained persons and EPWs? Will the echelon commander provide security [guards] for EPW treated and evacuated through medical channels?)*

(3) Has an eligibility determination been made for care in US facilities? *(The eligibility determination is made at the highest level possible in coordination with the Staff Judge Advocate (SJA). The determination should address personnel such as DOD civilians, other governmental agencies, DOD contractors, NGOs, HN civilians, or any other personnel/groups/organizations who may seek medical care in a US facility. Once the policy has been determined, it should be disseminated to the lowest level possible. [Refer to Section III below.])*

(4) Are there any hospital resources within the theater that can operate as shared resources with hospitals from the other Services? *(To ensure that a duplication of services does not occur, the HSS planner must determine if there is any state-of-the-art medical equipment [high dollar cost] which all Services could use at one location rather than equipping each Service hospital separately?)*

e. *Medical Evacuation and Medical Regulating.*

(1) What is the theater evacuation policy? *(The theater evacuation policy is a significant factor in determining what the medical infrastructure will be within the theater. The shorter the evacuation policy, the less treatment assets [especially hospitals] will be required in theater. Is the theater evacuation policy anticipated to change during the operation? Are there exceptions to the theater evacuation policy permitted [such as for SOF]?)*

(2) What are the specific responsibilities for each Service component? *(Each Service component is usually responsible for the medical evacuation of their own forces from Levels I and II to Level III. Will one Service component be responsible for this function for all joint forces within the AO [such as the US Army providing medical evacuation for USMC ground forces to hospital ships and/or casualty receiving and treatment ships (CRTSs)]?)*

(3) Will a TPMRC or a GPMRC be activated for the operation? *(Will the joint TPMRC and/or GPMRC be established to coordinate medical regulating operations? What units will coordinate with the TPMRC for medical regulating information [this is normally accomplished by the MRO of the medical command (MEDCOM) or medical brigade; however, a Level II unit may coordinate for this support if other C2 units are not deployed within the AO].)*

(4) Will a MASF or aeromedical staging facility (ASF)/ASTS be established for staging patients awaiting medical evacuation aircraft? *(Where will they be located? Is it anticipated that they will be required to relocate during the operation? How much time is required to relocate the units? Once patients have arrived at the MASF/ASF/ASTS how long can they be held? If the incoming flight is canceled who will pick up the patients and sustain them until the next scheduled flight?)*

(5) What other USAF aeromedical evacuation resources will be available in theater? *(This should include a discussion of aeromedical evacuation liaison teams, aeromedical evacuation crews, and critical care air transport (CCAT) teams. Will the USAF have sufficient CCATs to provide en route medical care on the aircraft? Does the Army OMF have to plan on providing medical attendants to provide en route medical care of critical care patients?)*

(6) How will patient movement items be handled? *(Related to [3] above. How will property exchange between US Army units/organizations be conducted? US Army and USMC? US Army and the*

USAF [MASF/ASF/ASTS]? US Army and USN? US Army and USCG? [Refer to FM 4-02.1 for additional information.]

(7) Are US Army aeromedical evacuation unit personnel deck-landing qualified for USN ships? *(Have pilots received the necessary training and certification to accomplish the shore-to-ship mission?)*

f. Health Service Logistics (to Include Blood Management).

(1) Has the combatant commander designated a SIMLM for the operation? *(Which Service has been designated to execute the integrated HSL mission? What procedures and/or formats are required to requisition supplies and medical equipment?)*

(2) How will medical equipment maintenance and repair be accomplished? *(What units/organizations will provide this support? Can this support be contracted for?)*

(3) What units/organizations will provide optical fabrication support? *(Where will units providing this support be located? Within the theater? In the support base?)*

(4) Are there donated medical supplies and equipment for use in accomplishing the mission? *(Are donated medical supplies and equipment available for use in FHA or disaster relief operations? Who is responsible for receiving, repackaging, storing, and distributing these items? What type of security is required to safeguard these supplies and equipment? Who will provide the required security?)*

(5) Are there any Service specific HSL requirements? *(Do the individual Services have any special requirements for HSL materiel or requirements which the Service providing the SIMLM function would normally not have/stock?)*

(6) How are blood management functions/activities conducted? *(The HSS planner must identify the medical units which will have blood requirements, the organizations that will support these requirements, and the responsibilities of the units requesting this support.)*

g. Dental Service.

(1) What dental resources are deployed in theater? *(Which Services have dental assets deployed in the theater? Can these assets provide support to Services without organic dental services on an area support base? What categories of dental care will be provided in theater [such as emergency or essential]?)*

(2) Is it anticipated that dental personnel will be required to perform their alternate wartime role during the operation? *(Are mass casualty operations anticipated? Will dental personnel be used to augment medical resources in mass casualty operations? Do dental personnel from all the Services have the training in ATM to perform the alternate wartime role?)*

(3) Where will dental resources be located? *(At the hospitals? In field dental units? In clinics or other outpatient settings?)*

h. *Veterinary Service.*

(1) Although the US Army is the Executive Agent for Veterinary Support for all Services, will the USAF conduct its own subsistence inspection on USAF installations? *(The HSS planner needs to determine if the USAF will conduct its own subsistence inspections on USAF installations. How does this impact the veterinary service support plan for the operation?)*

(2) What types of rations are to be used by the forces in theater? *(The type of ration used [such as MREs versus A rations versus unitized group rations (UGRs)] will determine the anticipated work load for the operation. Are medical supplemental rations available?)*

(3) Will military working dogs (MWD) and/or other government-owned animals be used in the operation? *(What Services/units will be employing MWD and/or government-owned animals? Where will these units/animals be located? What functions will the animals perform? Will there be other government-owned animals belonging to other governmental agencies [non-DOD] which must be sustained?)*

(4) Does a command policy exist on unit mascots or pets? *(What is the theater policy on maintaining unit mascots or pets? Have they been screened for diseases transferable to man? Have they been immunized?)*

(5) How will animals requiring evacuation be managed? *(What vehicles will be used to perform the evacuation [such as dedicated medical vehicles or general transportation assets]? Will the handler accompany the animal? If the handler cannot accompany the animal, will the animal require sedation for the evacuation?)*

i. *Combat Operational Stress Control/Mental Health Activities.*

(1) Do all the Services have MH personnel deployed to the theater? *(Do all of the Services have organic COSC/MH resources? Are there any Services which will require COSC/MH support on an area support basis?)*

(2) During the operation is it likely that a mass casualty situation will develop? *(What is the type of operation? What is the level of violence likely to be encountered? What is the likelihood of a mass casualty situation arising? Are assets available to provide COSC interventions during mass casualty operations?)*

(3) What is the likelihood of a terrorist attack? *(What is the terrorist threat? Would the likely target be a military installation and/or unit? Would the likely target be in a civilian area [such as in a subway, transportation hub, or public building]? Are COSC assets available to provide interventions for victims, care givers, or rescue personnel?)*

j. *Medical Laboratory Support.*

(1) What medical laboratory assets will be deployed to the theater? *(Will all Services have organic medical laboratory assets to assist in the diagnosis of diseases? Will any of the Services require medical laboratory support from the other Services?)*

(2) What medical laboratory will provide the identification of suspect BW and CW agents? *(Will an intheater laboratory have this capability? How will specimens/samples of suspect BW and CW agents be obtained? Are there any special handling requirements for suspect BW and CW agent specimens/samples? How will the chain of custody be maintained for suspect BW and CW agents while in transit?)*

(3) Will a near-patient testing capability be present in any of the in-theater medical units? *(Will medical units without organic laboratory support be able to do any near-patient testing [such as dipsticks]? What units will have this capability?)*

(4) Will any intheater medical laboratory assets have a split-base operating capability? *(Can any of the intheater laboratories conduct split-base operations? Can laboratory teams be deployed to collect specimens/samples of suspect BW and CW agents? Can teams be deployed to investigate and/or collect samples/specimens from disease outbreaks?)*

k. *Operations in a Nuclear, Biological, and Chemical Environment.*

(1) Is the use of NBC weaponry anticipated? *(Is there an imminent threat for the use of NBC weaponry by the enemy/opposition? What is the potential threat for a terrorist incident involving the use of NBC weapons/devices to occur during the operation? Is there a TIMs threat that can be exploited by the enemy of terrorists in the AO?)*

(2) What is the potential for accidental contamination? *(Is there the potential of contamination from an accidental release of radiation and/or chemicals by a commercial source [such as a nuclear power plant or chemical manufacturing facility]?)*

(3) What medical units have the capability to perform patient decontamination operations? *(Do all Services have an organic patient decontamination capability? If no, what units will provide this support on an area support basis? Is nonmedical augmentation required to conduct these operations [such as nonmedical personnel performing this function under the supervision of medical personnel]? Patient decontamination is a responsibility of all levels of medical care.)*

(4) What are the reporting and notification requirements in the event of a suspect NBC incident? *(Are report formats and required submission time factors standardized across the Services for reporting suspect NBC incidents?)*

(5) Is collective protection available for MTFs? *(Do all Services have organic collective protection shelters for MTFs? If no, will certain MTFs with collective protection be designated as the units to provide patient decontamination support?)*

(6) Are veterinary personnel available to inspect NBC contaminated subsistence? *(If not, who makes the decision that contaminated subsistence items can be decontaminated and determined to be safe for consumption? Are these procedures standardized in unit SOPs?)*

(7) Are PVNTMED personnel available to inspect NBC contaminated water supplies? *(If no, who determines that contaminated potable water can be treated and consumed?)*

(8) Are immunizations, chemoprophylaxis, antidotes, pretreatments, and barrier creams available? *(Are soldiers immunized against the most likely BW agents which might be employed? Are there any chemoprophylaxis available for the most likely BW agents which might be employed? Are there any pretreatments for potential exposure to nerve agents and/or other CW agents which might be employed? Are barrier creams available?)*

Section II. PLANNING CONSIDERATIONS FOR MULTINATIONAL OPERATIONS

F-3. Multinational Operations

Multinational operations present new challenges to the HSS planner. In addition to ensuring the rapid, effective, and efficient delivery of health care on the battlefield for US forces, the planner must coordinate support with the health authorities of all participating nations. Thorough coordination is required to ensure that a duplication of services does not occur and that maximum use and benefit is achieved from scarce medical resources. Health service support in multinational operations is a national responsibility (Joint Pub 4-02).

F-4. Multinational Operations Health Service Support Planning Checklist

a. Planning Considerations.

(1) What is the mission of the force and how does it effects HSS operations? *(Does the mission involve combat operations? Peacekeeping? FHA? How does the type of mission affect the composition of the HSS force [far forward surgical capability for combat wounded or pediatric, geriatric, obstetric, and general medicine requirements for FHA or refugee operations]? Is this operation being conducted under the auspices of an organization such as the UN and how does that effect the HSS infrastructure?)*

(2) What is the composition of the force? *(What is the composition and size of the US contingent? How many other nations are participating? What is the size of each national contingent?)*

(3) What are the HSS capabilities of the force? *(What is the medical troop ceiling for the US forces? What medical personnel, units, and equipment do the other national contingents have? Can US forces be treated by another nation's medical personnel or in another nation's treatment facilities? Can members of other national contingents be treated in US facilities? What is the education, training, and experience level of health care professionals from participating nations?)*

(4) Who has been designated to provide HSS to the multinational force? *(Is each national contingent providing all aspects of medical care for their forces? Has one nation been designated to provide HSS to all nations? Does each national contingent have separate responsibilities [such as one nation providing medical evacuation support and/or another nation providing dental support]?)*

(5) Has a command surgeon been identified to oversee and coordinate medical activities within the multinational force? *(If yes, what nation? What are the roles and responsibilities of this position? Is there a multinational medical staff section to plan for HSS operations? If no, how will medical issues be resolved among the nations? Are there medical liaison officers assigned to the participating nations' surgeons offices? What authority/technical supervision does this staff officer have over US HSS operations?)*

(6) Are there any ISAs among the participating nations? *(Are all of the countries participating a part of NATO or the ABCA armies? If no, will nations not a party to the ISAs abide by the medical protocols, procedures, and techniques identified in the ISAs? NOTE: Many of the ISAs deal with medical materiel standards such as the size of the NATO standard litter. It is unlikely that coalition forces would adopt/purchase a different type of litter just for the operation. However, other ISAs pertain to medical treatment protocols, report formats, notification requirements, and procedural tasks. These ISAs may be easily adapted to the current operation.)*

(7) What is the anticipated level of compliance with the provisions of the Geneva Conventions (friendly and enemy)? *(Are all participating nations signatories to these conventions? Are command policies and procedures in consonance with these conventions? How will conflicts be resolved? What is the likely disposition of the enemy to honor the protections afforded under the Geneva Conventions?)*

(8) Will all nations have interoperable communications and automation systems? *(If no, will one country equip the multinational force C2 elements with compatible systems? What reports are required using automated systems? Can these reports be completed by hand and submitted using a courier or messenger? How will requests for medical evacuation be received? Is using wire communications more feasible than radio transmissions? Are interpreters available at each C2 headquarters?)*

(9) Has a determination of eligible beneficiaries (in conjunction with the SJA) been made for care in US facilities? *(Has a policy statement been formulated and disseminated? Refer to Section III below for additional information.)*

(10) If (when) members of the participating nations are treated in US facilities, what is the mechanism for returning them to their parent nation for continuing medical care? *(Do the other nations have treatment facilities established in the AO to which these patients could be transferred after receiving emergency, stabilizing care? If there are only US facilities within the AO, who will evacuate these patients to their homelands? What coordination is required to return a patient to his nation's facilities and/or evacuate him from the AO?)*

(11) What is the anticipated level of violence to be encountered? *(Should the primary focus of HSS be on combat trauma or DNBI [in stability operations and support operations unit/personnel ineffectiveness usually results from DNBI rather than combat-related injuries]? Is it anticipated that a change in the level of violence will be experienced during the operation? Are there sufficient medical supplies and equipment available to transition from one environment to another? Will augmentation of HSS resources be required if the OPTEMPO changes?)*

(12) What are the ROE? *(How do they impact on the HSS mission? NOTE: Rules of engagement are constraints on the use of force, they are not the procedures by which operations are executed.)*

(13) What are the mechanisms for reimbursement of services? *(How will the country providing support be reimbursed for the services provided? Will repayment come directly from national contingents or through an international organization such as the UN? What restrictions apply to the use of funds from US forces? What services/support provided by US forces can be reimbursed [such as medical supplies and equipment used, hospitalization costs, or medical evacuation support]?)*

b. *Preventive Medicine and the Medical Threat.*

(1) What are the diseases (endemic and epidemic) in the AO and/or in the separate national contingents? *(How is medical intelligence on the proposed AO obtained [intelligence preparation of the battlefield, AFMIC, USACHPPM, or other sources]? Have any of the participating nations conducted lengthy operations in the proposed AO and documented the medical threat? Are the disease outbreaks seasonally related [such as during monsoons]? Have disease surveillance missions been previously conducted in the proposed AO?)*

(2) Are immunizations or chemoprophylaxis available to counter the disease threat? *(Have US forces been immunized and/or provided chemoprophylaxis? Have other national contingents been immunized and/or provided chemoprophylaxis?)*

(3) Have site surveys been conducted in areas US forces will inhabit? *(Have bivouac areas been inspected prior to establishing the site? Will US forces be housed with members of other national contingents? Were any areas determined to be hazardous [such as sewage runoff, fly or other arthropod infestation, or soil contaminated by TIMs]? Can adverse environmental conditions be corrected? Is selection of another site required? Was the site previously used by other forces? Are sanitation facilities adequate? Are the methods of human waste disposal being used in compliance with environmental laws/policies of the HN [such as using chemical toilets or individual waste collection bags])?*

(4) What PVNTMED support will US forces provide other national contingents? *(Will pest management programs be implemented in all unit areas or only in US forces AOs? Will US PVNTMED personnel inspect water supplies for all nations or just US forces? Will US PVNTMED personnel conduct dining facility inspections for all nations or just US forces? Will medical surveillance operations be conducted for all nations or for US forces only?)*

(5) What is the level of training in field hygiene and sanitation for US forces and other national contingents? *(Is an active PVNTMED education program required for US forces? For other national contingents? If so, who will provide the training? Are field hygiene and sanitation standards being enforced?)*

(6) Is it anticipated that refugee, IDP, retained/detained persons, and/or EPW operations will be required? *(Which nation will be responsible for field hygiene and sanitation if refugee and/or EPW camps must be established? Are sufficient PVNTMED assets available within country to provide this support? Is augmentation required? What would be the impact on the provision of PVNTMED to US forces if augmentation was not available?)*

(7) How will medical waste be collected and disposed of? *(Command policy must be established to ensure the proper collection and disposal of medical waste generated by MTFs or other medical operations.)*

(8) Do units have required field hygiene and sanitation supplies and equipment on hand? *(Do US forces? Do other national contingents? If the national contingents do not have adequate supplies and equipment available, will these supplies/equipment be provided by the US forces? Is training required for use of this equipment?)*

(9) Do soldiers have personal protective supplies and equipment available and/or issued? *(Are sunscreen, sunglasses, insect repellent, bed nets, or other personal protective supplies/equipment on hand or available for issue? Do the national contingents have these items? If they do not, will they be provided by US forces?)*

c. *Medical Treatment (Area Support).*

(1) Are interpreters available to translate patient complaints to the attending medical personnel? *(Is DA Pam 40-3 available? Has a local language guide been developed if the patients speak languages which are different from those contained in DA Pam 40-3? NOTE: This also applies to hospitalization.)*

(2) What units are providing Levels I and II medical care? *(Are Levels I and II medical care being provided to non-US units/personnel on an area support basis? What units are providing this support? What are the capabilities of the units providing this support? Do Level II units have a holding capability? For how long? Do Level II units have x-ray, laboratory, MH [COSC], and PVNTMED capability?)*

d. *Hospitalization.*

(1) What hospitals are established in the AO? *(Are these US facilities? What are the capabilities of these hospitals? What is the anticipated length of stay [theater evacuation policy and hospital capability will affect the time factors for length of stay]?)*

(2) What ancillary services are offered by the hospitals? *(This will be affected by the anticipated duration of the operation and the theater evacuation policy. If convalescence for some injuries/illnesses is anticipated to occur within the theater, ancillary support such as PT or OT may be available within the hospital. If the theater evacuation policy is short [essential care in theater], the majority of patients would be stabilized and evacuated from the theater for definitive care in the support base.)*

(3) What is the surgical capability of in-theater hospitals? *(Does a far forward surgical capability exist [such as a FST]? Is there a surgical backlog?)*

(4) What procedures/notifications are required when a non-US soldier is admitted to a US facility? *(Who notifies the soldier's national contingent? How and when is the patient transferred to his national contingent?)*

(5) Will non-US physicians be permitted to treat patients in a US facility? *(What will the scope of practice be? What credentialing processes must occur? Who provides technical/professional oversight?)*

(6) Has a formulary been established for prescription drugs? *(Does it include medications for diseases endemic to the multinational force, as well as to the AO? Does it include medications for FHA operations, if appropriate?)*

(7) What outpatient services will be provided? *(Will there be outpatient clinics conducted on a recurring basis? Does the hospital/clinics have an area support mission?)*

(8) How will patients be transferred from one hospital to another within the theater? *(Who will provide the transportation assets? What coordination is required to affect the transfer?)*

e. Medical Evacuation and Medical Regulating.

(1) What is the theater evacuation policy? *(Is it the same for all national contingents? Are there any exceptions to the evacuation policy permitted [such as for SOF personnel?])*

(2) What units are conducting medical evacuation operations? *(Can US forces be evacuated by another nation's assets? Can US forces be evacuated to another nation's MTFs? Are US forces providing medical evacuation support on an area support basis to the other national contingents?)*

(3) What types of evacuation assets are available? *(Air or ground? Dedicated or nonstandard evacuation platforms? Vehicle or aircraft of opportunity? Do all participating nations have organic evacuation assets?)*

(4) How are requests for evacuation transmitted? *(Is there a prescribed standard evacuation request format established? Are dedicated medical evacuation radio frequencies established or are land lines used? Do all units have access to communications equipment to initiate a request? If no, how will specific units submit requests?)*

(5) How will units requesting medical evacuation be located and identified? *(Have procedures for identifying units from the air been standardized [such as using colored smoke]? Have ground evacuation units been provided strip maps, overlays, or other navigational aids/information?)*

(6) Do medical evacuation vehicles/aircraft require armed escort while performing their mission? *(If yes, what units will provide this support? What is the response time? Can medical vehicles only move as part of convoys or are they permitted to move independently?)*

(7) How will patient movement items (PMI) be managed? *(Will direct exchange for PMI be made? If equipment remains with the patient and direct exchange does not occur, how will the OMF's equipment be replaced? Are PMI interoperable with other national contingents? Can other national contingents' medical equipment be used on-board US aircraft [airworthy certification] and ground evacuation vehicles?)*

(8) Will MASFs/ASFs/ASTSs [or similar organizations] be established at airheads to sustain patients awaiting evacuation from the theater? *(If yes, what nation will provide these organizations or functions for the multinational force? If no, how will patients awaiting evacuation from the theater be sustained?)*

(9) What nation will provide the medical regulating function? *(Will each nation perform the medical regulating function for their facilities? Will the US perform this function for the multinational force?)*

Will the TPMRC (or similar organization) be activated? Will each country provide its own strategic medical evacuation function? Will the USAF provide the strategic capability for the multinational force?)

f. Health Service Logistics (to Include Blood Management).

(1) What is the Class VIII stockage level? (Has theater policy been established and disseminated concerning the days of supply required for Class VIII in US medical units?)

(2) What is the impact of multinational operations on blood management? (Are there any cultural, religious, or social prohibitions on the use of blood and blood products for any of the national contingents? May US forces receive blood from other nations? If yes, how will the blood be tested before use? Can blood testing and collection be accomplished in the theater? Can blood requirements be fulfilled by collecting blood from members of the participating nations? What is the capability to store and maintain blood and blood products in the theater? Will the US provide blood support to the other national contingents? What reporting system will be established to track patients who have been transfused? What reports are required on a daily or weekly basis [such as the blood reports discussed in Joint Pub 4-02 or FM 8-55]?)

(3) Is the US tasked to provide HSL support to the multinational force? (Has the US Army been designated as the SIMLM for US forces? For the multinational force?)

(4) Are there donated medical supplies and equipment for use in accomplishing the mission? (Are donated medical supplies and equipment available for use in HA or disaster relief operations? Who is responsible for receiving, repackaging, storing, and distributing these items? What type of security is required to safeguard these supplies and equipment? Who will provide required security?)

(5) How will resupply be affected? (Are units using line item requisitioning or are combat configured loads being used? Will supply point distribution be used? Will medical vehicles/aircraft provide backhaul for medical supplies, equipment, and blood?)

(6) What reports are required to be submitted to the supporting HSL facility? (Are these reports automated? Are automated systems interoperable? What are the report formats and suspense times/dates?)

(7) Can medical supplies and equipment from non-US sources be used for US forces? (Do foreign pharmaceuticals meet FDA guidelines? Can foreign made medical equipment be maintained and repaired by US forces?)

(8) If operations are conducted under the auspices of an international organization (such as the UN) how do their supply/resupply procedures and requirements impact on US Class VIII operations? (Will US forces be constrained to only using designated sources? Do these sources meet appropriate guidelines?)

g. Dental Service.

(1) What units will provide dental services for the multinational force? (Does each national contingent have field dental assets deployed in the theater? Will one nation provide dental support to the multinational force?)

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(2) What is the scope of dental services to be provided within theater? (*Emergency or essential?*)

(3) Do all members of the multinational force have panographs on file for identification purposes? (*United States forces have panographs on file for forensic identification, if required. Will all national contingents have these x-rays taken?*)

(4) Will a preventive dentistry program be implemented for US forces and/or multinational forces in theater? (*What activities will comprise the preventive dentistry program in theater? Dental screenings? Mandatory training/education program? Will these activities be extended to the other national contingents in the multinational force?*)

(5) What dental conditions will necessitate the evacuation of patients from the theater? (*What oral conditions cannot be treated satisfactorily in theater? What coordination is required to arrange for the evacuation of dental patients?*)

h. Veterinary Service.

(1) What type of rations are to be used in theater? (*This is dependent upon the anticipated duration of the operation and the availability of food sources within the theater.*)

(2) Will Class I operations be consolidated for the multinational force? (*Will each national contingent cultivate its own food sources or will all contingents receive their subsistence from the same sources?*)

(3) Will US forces provide veterinary inspection of subsistence for food safety and quality assurance for multinational forces? (*Will veterinarians only inspect food sources used for subsistence for US forces or for the entire multinational force?*)

(4) Will government-owned animals be used in the operation? (*Will MWDs or pack animals be used in the operation? Will US forces provide animal medical care to US forces animals or for the multinational force?*)

(5) Has a command policy been disseminated on unit mascots/pets? (*If unit mascots are permitted, who will provide care for these animals? Have they been vaccinated for zoonotic diseases transmissible to humans?*)

(6) How will animals be evacuated? (*If animals require evacuation will they be evacuated on dedicated medical vehicles/aircraft? On general transportation assets? Will the handlers accompany the animals? If the handlers do not accompany the animals, are special precautions [such as muzzles or sedation] required? If animals are not US-owned, where will they be evacuated to? Will each nation evacuate its own animals? How will animals evacuated/treated by US forces be returned to their national contingent?*)

(7) Will the operation involve nation assistance activities? (*Will veterinary support requirements include animal husbandry activities for the HN populace? Are agencies [such as the United States*

Agency for International Development (USAID)] conducting veterinary activities within the AO? Do the other national contingents participating in the operation have resources which could be used in these activities?)

(8) What veterinary PVNTMED activities will be implemented in-theater? (Will zoonotic disease surveillance be conducted? Will epidemiological investigations be conducted when outbreaks of transmissible diseases occur? Who will conduct these activities? What coordination is required with the HN or other national contingents?)

i. Combat Operational Stress Control/Mental Health Activities.

(1) Is each national contingent responsible for its own MH programs and treatment? (Who will provide mental health services to each national contingent? If one nation is providing these services to the multinational force, what accommodations will differences in language require?)

(2) How will NP and/or COSC patients be evacuated? (On dedicated medical vehicles? On general transportation assets? Will NP patients require an escort, sedation, or restraints for evacuation by aircraft?)

(3) What preventive programs will be implemented in theater? (Will preventive programs be implemented for US forces? For the multinational force?)

(4) Who will conduct critical event debriefings? (Is each national contingent responsible for its own COSC activities? Will all soldiers [regardless of nationality] affected by the traumatic/catastrophic event be debriefed at the same time? Who provides follow-up care, if required?)

j. Medical Laboratory Services.

(1) What laboratory capability exists within the national contingents? (Do the field medical units have a laboratory capability? What is the scope of diagnostic laboratory services available in the hospitals? Are there any independent military laboratory units within the multinational force?)

(2) How are suspect BW and CW specimens and samples collected, handled, stored, and transferred? (Who collects suspect BW/CW specimens and samples? How is the chain of custody maintained on suspect BW/CW specimens and samples? What special handling requirements exist for storing and transporting suspect BW/CW specimens and samples? Is there a medical laboratory within the theater which can analyze suspect BW/CW specimens and samples? What coordination is required to transfer suspect BW/CW specimens and samples out of the theater to an appropriate testing facility?)

k. Operations in a Nuclear, Biological, and Chemical Environment.

(1) What is the potential threat for use of NBC weaponry during the operation? (Is there an imminent threat for the use of NBC weaponry by the enemy/opposition? What is the potential threat that a terrorist incident involving the use of NBC weapons/devices may occur during the operation?)

(2) What is the level of protection for each national contingent? *(Do all national contingents have MOPP equipment? If yes, what level of protection is afforded? If no, will one nation supply the needed equipment to the participating nations without the equipment?)*

(3) Is collective protection available to the MTFs? *(Are collective protection shelter systems available to all participating nations? If no, will one nation supply the needed shelters to the participating nations without shelters?)*

(4) Have patient decontamination teams been identified from supported units? *(Have designated personnel been notified? Do all nations have the organic ability to conduct patient decontamination? Is augmentation required [nonmedical soldiers performing the function under the supervision of medical personnel]?)*

(5) What are the reporting and notification requirements in the event of a suspect NBC incident? *(Are there standard formats for reporting any suspected incidents? How will the entire force be alerted to the possibility of an NBC attack? Will the US NBC warning system be used or will another system be established for the operation?)*

(6) Are veterinary personnel available to inspect NBC contaminated subsistence? *(If not, who makes the decision that contaminated subsistence items can be decontaminated and determined to be safe for consumption? Are these procedures standardized in the multinational force [such as in unit SOPs]?)*

(7) Are PVNTMED personnel available to inspect NBC contaminated water supplies? *(If no, who determines that contaminated potable water can be treated and consumed?)*

(8) Are treatment protocols established for the treatment of NBC casualties? *(Are all the participating nations in agreement on the treatment protocols to be used? Do all participating nations have the necessary medications and medical equipment to treat these casualties?)*

(9) Are immunizations, chemoprophylaxis, antidotes, pretreatments, and barrier creams available? *(Are soldiers immunized against the most likely BW agents which might be employed? Are there any chemoprophylaxis available for the most likely BW agents which might be employed? Are there any pretreatments for potential exposure to nerve agents and/or other CW agents which might be employed? Are barrier creams available?)*

Section III. ELIGIBILITY DETERMINATION FOR MEDICAL/DENTAL CARE

F-5. Eligibility for Care in a United States Army Medical Treatment Facility

a. During interagency and multinational operations, one of the most pressing questions is who is eligible for care in a US Army established MTF and the extent of care authorized. Numerous categories of

personnel seek care in US facilities that are located in austere areas where the HN civilian medical infrastructure is not sufficient to provide the adequate care. A determination of eligibility and whether reimbursement for services is required is made at the highest level possible and in conjunction with the supporting SJA. Additionally, Department of State and other military staff sections (such as the Assistant Chief of Staff [Civil-Military Operations] [G5]) may also need to be involved in the determination process. Each operation is unique and the authorization for care is based on the appropriate US and international law, DODD and DODI, Army regulations, doctrine, and SOPs. Other factors impacting on the determination of eligibility are command guidance, practical humanitarian and medical ethics considerations, availability of US HSS assets (in relationship to the threat faced by the force), and the potential training opportunities for HSS forces. The sample format provided in paragraph F-6 is just one approach to delineate and disseminate this information to MTF personnel and may not be all inclusive based on specific scenarios.

NOTE

The examples for the authority to provide treatment are *only illustrative* in nature and should not be used as the basis for providing or denying medical care.

b. Basic documents required for determining eligibility of beneficiaries include AR 40-400; FM 27-10; relevant sections of Title 10, United States Code; relevant DODD and DODI; ISAs; Acquisition and Cross Servicing Agreements (ACSAs); orders from higher headquarters; interagency agreements (MOU and MOA); and appropriate allied, coalition, or international agency guidance for the specific operation. If contractor personnel are present, a copy of the relevant sections of their contracts should be on file to delineate specific medical services to be rendered. Additionally, for contract personnel a point of contact (POC) for the contracting company and a POC for the administration of the contract should be maintained. Finally, the political-military environment of the AO must be taken into account as the medical C2 headquarters and its higher headquarters develop the eligibility matrix.

c. The eligibility matrix should be as comprehensive as possible. If necessary, it should include eligibility determination by name (see example in paragraph F-6). If individuals arrive at the emergency medical service (EMS) section of the MTF who are not included in the medical/dental support matrix, the MTF must always stabilize the individual first, then determine the patient's eligibility for care. The command POC for eligibility determination should be contacted immediately. Further, care will be provided in accordance with the SOP pending eligibility determination. (For example, a HN civilian presents himself at the gate and requests medical treatment. Although on the surface it may appear that he is not eligible for care, this determination can only be made after a medical assessment is completed by competent medical personnel. In some cases, the individual may have to be brought into the MTF to accomplish an adequate medical assessment. Conducting a medical assessment does not obligate the US military to provide the full spectrum of medical care. Although it does obligate the MTF to provide immediate stabilization for life-, limb-, and eyesight threatening medical conditions and to prepare the patient for evacuation to the appropriate civilian or national contingent MTF when the patient's medical condition permits.)

NOTE

Any individual requesting medical care should receive a timely medical assessment of his condition. Even though the individual is not eligible for treatment, life-, limb-, or eyesight-saving procedures warranted by the individual's medical condition are provided to stabilize the individual for transfer to the appropriate civilian or other nation MTF.

d. The MTF staff must be familiar with the medical care available in the AO from other sources. These could include allied, coalition, or HN military (tactical and strategic) forces, NGO or international organizations (such as the UN), and local civilian resources. When appropriate and by knowing the level and types of care available, the MTF staff can plan for the continued care of the patient after initial stabilization is provided in the US MTF and the patient can be transferred to another facility for continued care.

e. It is essential that eligibility for medical care guidance is disseminated and understood by the chain of command and all civilians and military members of the deployed force. The HSS commander must be able to articulate the basic concepts for medical eligibility determinations. This means that he will need to condense them into simple, easily understood instructions, and widely disseminate them through electronic means or other media (such as pocket-sized cards). As the chief planners for medical operations, the HSS commander must ensure that this information is contained in appropriate OPLANs and OPORDs and briefed to the appropriate senior leadership of the command.

F-6. Sample Support Matrix for Eligibility of Care in a United States Army Medical Treatment Facility

ELIGIBILITY FOR MEDICAL/DENTAL CARE SUPPORT MATRIX (DATE) (THIS DOCUMENT IS SUBJECT TO FURTHER VERIFICATION AND/OR MODIFICATION)		
CATEGORY	MEDICAL DENTAL	INFORMATION/AUTHORITY*
ALLIED MILITARY PERSONNEL	YES ¹	THE FOLLOWING NATIONS HAVE ACSAs AND ISAs WITH THE US WHICH ARE ADMINISTERED BY (UNIFIED COMMAND): LIST NATIONS
COALITION MILITARY PERSONNEL	YES ¹	THE FOLLOWING NATIONS HAVE ACSAs AND ISAs WITH THE US WHICH ARE ADMINISTERED BY (UNIFIED COMMAND): LIST NATIONS
DOD CIVILIAN EMPLOYEES	YES	INVITATIONAL TRAVEL ORDERS (ITOs)
US GOVERNMENT EMPLOYEES (NON-DOD)	YES ²	ITOs
US EMBASSY PERSONNEL	YES	US CITIZENS ON OFFICIAL BUSINESS

CATEGORY	MEDICAL DENTAL	INFORMATION/AUTHORITY*
US CONGRESSIONAL PERSONNEL	YES	US CITIZENS ON OFFICIAL BUSINESS
ARMY AND AIR FORCE EXCHANGE SERVICE (AAFES) US CITIZEN EMPLOYEES	YES	ITOs
AAFES LOCAL NATIONAL EMPLOYEES	YES ³	US LAW
NONAPPROPRIATED FUND INSTRUMENTALITY (NAFI) MORALE, WELFARE, AND RECREATION (MWR) US EMPLOYEES	YES	ITOs
NAFI (MWR) LOCAL NATIONAL EMPLOYEES	YES ³	US LAW
OTHER PERSONS ON DOD ITOs	YES	ITOs
US GOVERNMENTAL AGENCY (SUCH AS USAID OR THE DEA) US CITIZEN EMPLOYEES	YES	ITOs
US GOVERNMENTAL AGENCY (SUCH AS USAID OR DEA) NON-US CITIZEN EMPLOYEES	YES ³	AFTER STABILIZATION, COORDINATE WITH THE US GOVERNMENT AGENCY POC TO EVACUATE THE PATIENT TO HIS COUNTRY OF CITIZENSHIP. AR 40-400 AUTHORIZES LIMITED CARE. CONTACT MR. BANNON, DSN XXX-XXXX.
CONTRACTOR EMPLOYEES WHO ARE US MILITARY RETIREES	YES ⁴	AR 40-400
CONTRACTED COLLEGE INSTRUCTORS	YES	ITOs
UNITED NATIONS PERSONNEL (INCLUDES ALL PERSONNEL EMPLOYED BY THE UN AND ITS AGENCIES, SUCH AS THE UN HIGH COMMISSIONER FOR REFUGEES [UNHCR])	YES ³	US LAW
AMERICAN NATIONAL RED CROSS	YES ³	DODD 1330.5
NON-GOVERNMENTAL ORGANIZATIONS PERSONNEL	YES ³	US LAW
CONTRACTOR #1 EXPATRIATE EMPLOYEES POC: MS SCOTT (XXX)XXX-XXXX ADMIN: MR. ELLIOTT DSN XXX-XXXX	YES	HAVE COPY OF RELEVANT CONTRACT.
CONTRACTOR #1 LOCAL NATIONAL EMPLOYEES POC: MS SCOTT (XXX)XXX-XXXX ADMIN: MR. ELLIOTT DSN XXX-XXXX	YES ³	HAVE COPY OF RELEVANT CONTRACT. US LAW AND SOFA.
CONTRACTOR #2 ALL EMPLOYEES POC: MR. FRANKLIN (XXX) XXX-XXXX ADMIN: MR. ELLIOTT DSN XXX-XXXX	YES ³ NO ⁵	CONTRACTOR DID NOT CONTRACT FOR THE PROVISION OF MEDICAL CARE BY MILITARY MTFs. CONTRACTOR STATED IN WRITING THAT THEY CONTRACTED WITH THE HN MEDICAL INFRASTRUCTURE FOR THE REQUIRED CARE. HAVE COPY OF RELEVANT CONTRACT. NOTE: A SEPARATE DETERMINATION MAY BE REQUIRED FOR INDIVIDUAL CASES, AS THE INDIVIDUAL MAY BE ELIGIBLE FOR CARE UNDER A DIFFERENT PROVISION. CONTACT MR. BANNON, DSN XXX-XXXX IF ADDITIONAL INFORMATION IS REQUIRED.

CATEGORY	MEDICAL DENTAL	INFORMATION/AUTHORITY*
CONTRACTOR #3 COMMUNICATIONS SECTION POC: MS. JO ALCE (XXX) XXX-XXXX ADMIN: MR. ELLIOTT DSN XXX-XXXX	YES ³	ITOs. NOTE: THIS ENTRY FOR CONTRACTOR #3 DOES NOT INCLUDE PERSONNEL ASSISTING PROJECT XYZ. THOSE PERSONNEL ARE CONTRACTED BY A DIFFERENT DIVISION OF THE CONTRACTOR AND ARE SUBJECT TO SEPARATE CONTRACT TERMS. CONTRACTOR #3 IN SUPPORT OF PROJECT XYZ HAS NOT SUBMITTED ANY INFORMATION FOR DETERMINING ELIGIBILITY FOR MEDICAL CARE AND/OR LOGISTICAL SUPPORT OF THESE PERSONNEL.
CONTRACTOR #4 MR. EDWARD LEE (COMPANY NAME CLASSIFIED) POC: MS. HANNAH (XXX) XXX-XXXX ADMIN: MR. ELLIOTT DSN XXX-XXXX	YES	PER MR. BANNON, MR. LEE IS ENTITLED TO FULL MEDICAL AND DENTAL SUPPORT WITHOUT REIMBURSEMENT. THE TERMS OF THE CONTRACT AND NAME OF THE CONTRACTING COMPANY ARE CLASSIFIED. CONTACT MR. BANNON, DSN XXX-XXXX IF ADDITIONAL INFORMATION IS REQUIRED.
CONTRACTOR #5 MR. NOAH JAMES (COMPANY NAME CLASSIFIED) POC: MS. HANNAH (XXX) XXX-XXXX ADMIN: MR. ELLIOTT DSN XXX-XXXX	YES ⁶	PER MR. BANNON, MR. JAMES IS ENTITLED TO FULL MEDICAL AND DENTAL SUPPORT, HOWEVER, THIS CARE IS REIMBURSABLE. THE TERMS OF THE CONTRACT AND THE NAME OF THE CONTRACTING COMPANY ARE CLASSIFIED. CONTACT MR. BANNON, DSN XXX-XXXX IF ADDITIONAL INFORMATION IS REQUIRED.
DEPENDENTS OF US ACTIVE DUTY OR RETIRED MILITARY.	YES ⁴	ONLY IF SPACE IS AVAILABLE AND APPROPRIATE MEDICAL SERVICES/CARE ARE AVAILABLE IN THE OPERATIONAL SETTING. AR 40-400. CONTACT MR. BANNON, DSN XXX-XXXX IF ADDITIONAL INFORMATION IS REQUIRED.
PERSONNEL IN CUSTODY OF US MILITARY FORCES	YES	US AND INTERNATIONAL LAW. THIS CATEGORY INCLUDES PERSONNEL IN PROTECTIVE CUSTODY, EPW, RETAINED, OR DETAINED PERSONNEL. EXTENT OF CARE RENDERED IS THE SAME AS THAT PROVIDED TO US MILITARY FORCES (FM 4-02, CHAPTER 4, <i>LAW OF LAND WARFARE</i> , AND FM 27-10).
INDIVIDUALS INJURED AS A RESULT OF MILITARY OPERATIONS.	YES	US, INTERNATIONAL LAW (FM 27-10), SOFA. IF THE US MILITARY INJURES AN INDIVIDUAL (SUCH AS IN AN AUTOMOBILE ACCIDENT INVOLVING A MILITARY VEHICLE), THE US IS RESPONSIBLE FOR PROVIDING IMMEDIATE CARE (OR PAYING FOR LOCAL CARE). COORDINATE WITH MR. BANNON, DSN XXX-XXXX AND LTC BRIAN, SUPPORTING SJA, DSN XXX-XXXX.

LEGEND:

* ILLUSTRATIVE IN NATURE ONLY.

1 ALLIED/COALITION FORCES MEMBER NATIONS ARE PROVIDED FOOD, WATER, FUEL, AND MEDICAL TREATMENT PURSUANT TO RECIPROCAL AGREEMENTS. THE AMOUNT OF FOOD, WATER, FUEL, AND MEDICAL CARE PROVIDED MUST BE ACCOUNTED FOR BY THE PROVIDING NATION TO THE G5, MULTINATIONAL LIAISON. LOGISTICAL SUPPORT IS NOT PERMITTED FOR THOSE NATIONS WITH WHOM THE US DOES NOT HAVE BOTH AN ACSA AND ISA. HOWEVER, THE ACSA AND ISA REQUIREMENTS MAY BE WAIVED FOR THOSE NATIONS WHOM THE TF COMMANDER, IN CONJUNCTION WITH THE SUPPORTING SJA, FEELS ARE SUPPORTING THE MISSIONS OF THE TF.

-
- 2 IF NOT WORKING FOR, CONTRACTED TO, OR ON DOD ITO FOR LOGISTICAL SUPPORT, NON-DOD US GOVERNMENT EMPLOYEES MUST PAY FOR MEALS RECEIVED AT DOD DINING FACILITIES.
 - 3 EMERGENCY MEDICAL AND DENTAL CARE ONLY. EMERGENCY CARE IS THAT CARE REQUIRED TO SAVE LIFE, LIMB, OR EYESIGHT.
 - 4 SPACE AVAILABLE.
 - 5 ROUTINE.
 - 6 REIMBURSABLE.
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APPENDIX G

TABLES OF ORGANIZATION AND EQUIPMENT NUMBERS MEDICAL FORCE 2000, MEDICAL REENGINEERING INITIATIVE, AND FORCE XXI UNITS

G-1. Tables of Organization and Equipment Information

This appendix provides the TOE numbers and nomenclature for Medical Force 2000 and MRI units. Detailed information on TOE specifics is contained in the appropriate functional area manuals. These manuals are referenced for each AMEDD functional area in Chapter 5.

G-2. Medical Force 2000—Tables of Organization and Equipment Numbers and Nomenclature

TOE NUMBER	NOMENCLATURE
08057L000	Medical Company (Main Support Battalion) (Heavy Division)
08058L100	Medical Company (Forward Support Battalion) (Heavy Division)
08059L200	Medical Company (Forward Support Battalion) (Supporting Two Heavy Battalions)
08267L000	Medical Company, Main Support Battalion, Airborne
08268L000	Medical Company, Forward Support Battalion, Airborne
08277L000	Medical Company, Main Support Battalion, Air Assault Division
08278L000	Medical Company, Forward Support Battalion, Air Assault Division
08279L000	Medical Company, Air Ambulance (Air Assault)
08297L000	Medical Company, Main Support Battalion, Light Infantry Division
08298L000	Medical Company, Forward Support Battalion, Light Infantry Division
08403L000	Medical Detachment, Veterinary Service Headquarters
08413L000	Medical Detachment, Veterinary Service
08422L100	Headquarters and Headquarters Company, Medical Brigade (Corps)
08423L000	Medical Detachment, Veterinary Medicine
08422L200	Headquarters and Headquarters Company, Medical Brigade (COMMZ)
08432L000	Headquarters and Headquarters Company, Medical Group
08433L000	Medical Detachment, Veterinary Service (Small)
08437L000	Medical Company, Heavy Support Brigade
08438L000	Medical Company, Separate Infantry Brigade (Arctic)
08438L100	Medical Company, Separate Infantry Brigade
08443L100	Medical Company, Air Ambulance (UH-1)
08443L200	Medical Company, Air Ambulance (UH-60)
08446L000	Headquarters and Headquarters Detachment, Medical Evacuation Battalion
08453L000	Medical Company, Ground Ambulance
08455L000	Medical Battalion, Area Support

TOE NUMBER	NOMENCLATURE
08456L000	Headquarters and Support Company, Area Support Medical Battalion
08457L000'	Medical Company, Area Support
08458L000	Medical Company, Holding
08463L000	Medical Detachment, Combat Stress Control
08467L000	Medical Company, Combat Stress Control
08476L000	Headquarters and Headquarters Detachment, Medical Battalion, Dental Service
08477L000	Medical Company, Support Squadron, Armored Cavalry Regiment
08478L000	Medical Company, Dental Services
08485L000	Medical Battalion, Logistics (Forward)
08486L000	Headquarters and Headquarters Detachment, Medical Battalion, Logistics (Forward)
08487L000	Logistics Support Company, Medical Battalion, Logistics (Forward)
08488L000	Distribution Company, Medical Battalion, Logistics (Forward)
08489L000	Medical Troop, Support Squadron, Armored Cavalry Regiment
08498L000	Medical Detachment, Preventive Medicine, Sanitation
08499L000	Medical Detachment, Preventive Medicine, Entomology
08518LA00	Forward Surgical Team
08518LB00	Forward Surgical Team (Airborne)
08527LA00	Medical Team, Head and Neck Surgery
08527LB00	Medical Team, Neurosurgery
08527LC00	Medical Team, Eye Surgery
08537LA00	Medical Team, Pathology
08537LB00	Medical Team, Renal Hemodialysis
08537LC00	Medical Team, Infectious Diseases
08611L000	Medical Command
08657L000	Theater Army Medical Laboratory
08695L000	Medical Battalion, Logistics (Rear)
08696L000	Headquarters and Headquarters Detachment, Medical Battalion, Logistics (Rear)
08967L000	Logistics Support Company, Medical Battalion, Logistics (Rear)
08698L000	Distribution Company, Medical Battalion, Logistics (Rear)
08705L000	Combat Support Hospital
08715L000	Field Hospital
08725L000	General Hospital
08736L100	Hospital Unit, Base (Combat Support Hospital)
08736L200	Hospital Unit, Base (Field Hospital)
08736L300	Hospital Unit, Base (General Hospital)

TOE NUMBER	NOMENCLATURE
08737L000	Hospital Unit, Surgical
08738L000	Hospital Unit, Medical
08739L000	Hospital Unit, Holding
08863L000	Mobile Army Surgical Hospital
08903L000	Medical Logistics Support Detachment

G-3. Medical Reengineering Initiative—Tables of Organization and Equipment Numbers and Nomenclature

TOE NUMBER	NOMENCLATURE
08411A000	Headquarters and Headquarters Company, Medical Command (Corps)
08416A000	Headquarters and Headquarters Detachment, Veterinary Support Battalion
08417A000	Food Procurement Detachment
08418A000	Animal Surgery Detachment
08419A000	Veterinary Service, Surveillance Detachment
08422A100	Headquarters and Headquarters Company, Medical Brigade (Corps)
08422A200	Headquarters and Headquarters Company, Medical Brigade (EAC)
08429A000	Medical Detachment, Preventive Medicine
08453A000	Medical Company, Ground Ambulance
08456A000	Headquarters and Headquarters Detachment, Area Support Medical Battalion
08457A000	Medical Company, Area Support
08463A000	Medical Detachment, Combat Stress Control
08473A000	Dental Company, Area Support
08488A000	Medical Logistics Company
08489A000	Blood Support Detachment
08496A000	Headquarters and Headquarters Detachment, Medical Logistics Battalion
08497A000	Logistics Support Company
08527AA00	Hospital Augmentation Team, Head and Neck
08537AA00	Hospital Augmentation Team, Pathology
08538AA00	Hospital Augmentation Team, Specialty Care
08539AA00	Medical Detachment, Telemedicine
08611A000	Headquarters and Headquarters Company, Medical Command (Theater)
08668A000	Area Medical Laboratory
08699A000	Medical Logistics Management Center
08753A000	Medical Detachment, Area Support

TOE NUMBER	NOMENCLATURE
08855A000	Combat Support Hospital (EAC) (Nonsplit Base)
08856A000	Headquarters and Headquarters Detachment, Combat Support Hospital (Nonsplit Base)
08857A000	Hospital Company, 164 Bed (Nonsplit Base)
08858A000	Hospital Company, 84 Bed (Nonsplit Base)
08949A000	Medical Detachment, Minimal Care
08955A000	Combat Support Hospital (284 Bed) (Corps)
08956A000	Headquarters and Headquarters Detachment, Combat Support Hospital (Corps)
08957A000	Hospital Company (164 Bed) (Corps)
08958A000	Hospital Company (84 Bed) (Corps)

G-4. Force XXI—Tables of Organization and Equipment Numbers and Nomenclature

TOE NUMBER	NOMENCLATURE
08108F300	Brigade Support Medical Company
08158F000	Medical Company (Forward Support Battalion) (Force XXI)
08257F000	Medical Company (Division Support Battalion) (Force XXI)

APPENDIX H

ANTITERRORISM, FORCE PROTECTION,
AND FIELD DISCIPLINE**H-1. Protection**

Protection is the preservation of the fighting potential of a force so the commander can apply maximum force at the decisive time and place. Protection is comprised of four components: force protection, field discipline, safety, and fratricide avoidance. *Force protection*, the primary component of protection, minimizes the effects of enemy firepower (including NBC weapons), maneuver, and information. *Field discipline* precludes losses from hostile environments (OEI hazards to include TIMs) and disease. *Safety* reduces the inherent risk to the soldier's life, health, and mission accomplishment caused by the operational environment. *Fratricide avoidance* minimizes the inadvertent killing or maiming of soldiers by friendly fires. For an in-depth discussion of protection refer to FM 3-0 and FM 100-14.

H-2. Force Protection

Force protection consists of those actions taken to prevent or mitigate hostile actions against DOD personnel (to include family members), resources, facilities, and critical information. Force protection does not include actions to defeat the enemy or protect from accidents, weather, and disease. It includes air, space, and missile defense; NBC defense; antiterrorism; defensive information operations; and security for operational forces and resources.

a. Force protection is a complex process in which each action impacts upon many others. Planning for force protection is a continuous process. Force protection in stability operations and support operations scenarios can pose significant challenges as interaction with and proximity to the HN civilian population is greater than in the other types of military operations.

b. The HSS commander is responsible for providing security for his unit and the patients under his care. In some scenarios, a combat or CS unit may provide security forces to assist in the defense of HSS units. In other situations, the HSS unit may not be collocated with other types of CSS units and the HSS commander must then provide completely for his own security.

c. In stability operations and support operations, medical units may be deployed into a given geographical area prior to the deployment of combat and CS forces. During FHA and disaster relief operations, the perceived terrorist threat may be low, but the commander must ensure that his security measures are adequate for the appropriate threat level. Further, he must ensure he has the capability to increase these protective measures should the operational scenario change and mission creep occur. If the political, social, or economic status of the HN or region deteriorates, an increase in the potential for terrorist activity may also be experienced. The HSS commander must continuously evaluate the potential for terrorist activity and adjust his force protection plan accordingly. Further, commanders must appreciate the reality, that deployed US forces are always a target for terrorist attack, as they represent the US presence abroad.

d. Unit and individual protective measures are discussed in detail in Joint Pub 3-07.3.

H-3. Force Protection and the Risk Management Process

a. Assessment of asymmetric threats and vulnerabilities via force protection planning is fundamental to full spectrum operations. Risk management (Appendix D) integrates force protection planning into the operations process. Commanders and staffs employ risk management to identify, assess, and control risks that arise from operational factors. By doing so, they are better able to make an informed decision and reduce hazards.

b. Force protection adapts the risk management process (FM 100-14) to specific threats and identifies vulnerabilities and countermeasures. The MDMP integrates force protection simultaneously with other risk management considerations. Asymmetric threat considerations have direct impact on COA development and analysis. These vulnerabilities and subsequent countermeasures are integrated into the operational planning process through risk management assessments and factors at the same time as other hazards and controls are considered.

c. Force protection is risk management adapted to the nonbattlefield threat spectrum. It supports risk management throughout the operations process and directly supports risk management in the MDMP and troop leading procedures. Protection of critical personnel and resources from asymmetric means, weapons, and tactics complement the hazard identification and assessment process of risk management.

d. However, force protection differs from risk management, also. Risk management addresses the potential hazards to US forces described in the field discipline, safety, and fratricide avoidance components of protection. Force protection employs threat-based assessment and links those threats to specific vulnerabilities. The force protection component adapts the risk management process and applies it to threat assessment and countermeasures employment. It specifically addresses asymmetric action by enemy forces and other groups or individuals against US forces. By specifically addressing potential asymmetric threats, force protection considerations compliment risk management and assist the commander in fully visualizing and describing the operation.

H-4. Vulnerability Assessments

a. Vulnerability assessments are essential to force protection planning. They provide the commander a tool to determine potential vulnerability of a unit. The assessment primarily focuses on the functions or activities vulnerable to attack by identified threats and critical to success of the mission. There are two types of vulnerability assessments: internal and external. The internal vulnerability assessment is conducted by the unit commander and focuses specifically on the unit mission, operations, location, property, and personnel. An external assessment is normally conducted by a higher headquarters for all of its subordinate units/elements.

b. Each vulnerability assessment should consider, at a minimum, the following:

- Criticality assessment of facilities and resources.
- Unit security procedures.

- Physical and operational security procedures.
- Information systems vulnerability.
- Structural engineering of buildings and facilities.
- Infrastructure vulnerabilities.
- High risk personnel.
- Nuclear, biological, and chemical capabilities/weapons and potential for use by enemy and/or terrorists.
- Drinking water systems.
- Weapons effects to personnel, facilities, or resources.

H-5. Field Discipline

Field discipline, the second component of protection, guards soldiers from the physical and psychological effects of the environment. Oppressive environments (adverse terrain, OEH hazards [heat, cold, altitude, TIMs]), DNBI, and other elements of the medical threat (such as stress, continuous operations, or poisonous and/or toxic flora and fauna [plants, animals, and arthropods]) can sap soldier strength and morale far more quickly than enemy action. Commanders take every measure and precaution to keep soldiers healthy and maintain their morale. This is especially true for HSS commanders as they are responsible for their own assigned/attached HSS personnel and must also ensure that proactive HSS measures are planned and implemented (such as medical surveillance activities, PVNTMED programs, COSC programs, and the like encompassing all AMEDD functional areas) to sustain the health of the command.

H-6. Combatting Terrorism

There are two elements of combatting terrorism—counterterrorism and antiterrorism. Counterterrorism are those offensive measures taken to prevent, deter, and respond to terrorism. Health service support personnel do not participate in counterterrorism operations, however, they provide the HSS to the forces conducting these types of operations. Antiterrorism operations are defensive in nature and the responsibility of each commander, leader, and soldier.

H-7. Terrorism Considerations

a. As commanders and staffs address terrorism, they must consider several relevant characteristics of terrorists and their activities. The first consideration is that anyone can be a victim. (Some terrorists still operate under cultural restraints, such as a desire to avoid harming women, but the planner cannot count on

that.) Essentially, there are no innocents. Secondly, attacks which may appear to be senseless and random are not. To the perpetrators, their attacks make perfect sense. Acts, such as bombing public places of assembly and shooting into crowded restaurants, heighten public anxiety and is the terrorists' immediate objective. By catastrophic events, such as those occurring on September 11, 2001 with the devastation of the World Trade Center in New York City and the attack on the Pentagon in Washington, D.C., the terrorists struck at the pulse of world finance and at the foundations of freedom within the nation. Thirdly, the terrorists need to publicize their attack. If no one knows about it, it will not produce fear. The need for publicity often drives the target selection; the greater the symbolic value of the target, the more publicity the attack brings to the terrorists and the more fear it generates. Finally, a leader planning for antiterrorism must understand that he cannot protect every possible target all of the time. He must also understand that terrorists will likely shift from more protected targets to less protected ones. This is the key to defensive measures.

b. Preventive and protective security measures should be taken by military units and individual soldiers to protect themselves and their ability to accomplish their mission. The commander develops an antiterrorism plan to institute passive defense measures. The commander must constantly evaluate security plans and measures against the terrorist threat in order to effectively identify security requirements. The commander must conduct an overall vulnerability assessment taking into account the various elements discussed in paragraph H-4b.

c. Medical units have specific protections afforded to them under the provisions of the Geneva Conventions. The HSS commander must understand that these protections probably will not be recognized nor adhered to by terrorist elements. The HSS commander, in developing his force security plan, should not rely upon the Geneva Conventions prohibitions as a protection from attack by terrorist elements.

d. Terrorists rely on surprise and the victim's confusion at the time of the incident. Antiterrorism involves physical security, OPSEC, and the practice of personal protective measures by all personnel. Commanders and staffs must plan their response to terrorist threats and incidents. Combatting terrorism is an aspect of force protection and is the responsibility of commanders at all levels at all times. Properly planned and executed, the Army antiterrorism program will reduce the probability of surprise while discouraging attack by raising the risk to the attackers.

H-8. Estimate of the Situation for a Security Assessment

The commander and his staff should complete a thorough estimate of the situation, using METT-TC and political planning factors, in developing a security assessment. The questions presented in Table H-1 may assist in formulating the estimate.

Table H-1. Mission, Enemy, Terrain and Weather, Troops and Support Available, Time Available, and Civil Considerations and Political Planning Factors

MISSION	1. WHAT TYPE OF MISSION IS TO BE CONDUCTED (SUCH AS FHA, MASS CASUALTY SITUATION, DISASTER RELIEF, PEACEKEEPING, DSO, OR CONVENTIONAL HSS)? 2. WHERE IS THE MISSION TO BE PERFORMED (SUCH AS WITHIN A SECURE COMPOUND, IN LOCAL VILLAGES/CITIES, OR IN A FIELD ENVIRONMENT)?
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Table H-1. Mission, Enemy, Terrain and Weather, Troops and Support Available, Time Available, and Civil Considerations and Political Planning Factors (Continued)

MISSION (CONTINUED)	3. IS THE ENTIRE UNIT OPERATING TOGETHER (SUCH AS ESTABLISHING A LEVEL II MTF), OR ARE SEPARATE TEAMS/ELEMENTS BEING DEPLOYED TO REMOTE LOCATIONS (SUCH AS A TREATMENT TEAM VISITING AN ISOLATED VILLAGE OR ESTABLISHING A CCP)? 4. IS THIS A MMTF MISSION WHERE HSS UNITS ARE DEPLOYED TO AN AREA PRIOR TO COMBAT AND CS FORCES? 5. ONCE DEPLOYED, DOES A CHANGE OF MISSION OR MISSION CREEP OCCUR?
ENEMY (OPPOSITION GROUPS, TERRORIST FACTIONS)	1. WHO ARE THE POTENTIAL TERRORISTS? 2. WHAT IS KNOWN ABOUT THE TERRORISTS? 3. HOW DO THE TERRORISTS RECEIVE INFORMATION? 4. HOW MIGHT THE TERRORISTS ATTACK? (THINK LIKE THE TERRORIST. WOULD YOU AMBUSH OR RAID? WOULD YOU USE SNIPERS, MORTARS, ROCKETS, AIR OR GROUND ATTACKS, SUICIDE ATTACKS, FIREBOMBS, OR BICYCLE, CAR, OR TRUCK BOMBS?) 5. WHAT AND/OR WHO ARE POTENTIAL TARGETS? IF YOUR FIRST CHOICE OF THE POTENTIAL TARGET IS WELL PROTECTED, WHAT WOULD BE AN ALTERNATE TARGET? 6. WHAT POTENTIAL TACTICS WOULD THE TERRORIST USE (SUCH AS REMOTE CONTROL DEVICES OR TIMING MECHANISMS; BOMBING A TARGET IN A CONGESTED AREA SO THERE ARE MANY INJURED AND WOUNDED AND SETTING A SECOND EXPLOSIVE DEVICE TO DETONATE AFTER FIRST RESPONDERS [SUCH AS EMERGENCY MEDICAL PERSONNEL] ARRIVE ON THE SCENE; OR DISPERSING ANTIPERSONNEL MINES AND/OR BW AND CW AGENTS IN HEAVILY POPULATED AREAS)? 7. DOES THE UNIT HAVE ROUTINES OR PUBLISHED OPERATING HOURS (SUCH AS STATED CLINIC HOURS FOR THE CARE OF HN PERSONNEL OR HOSPITAL SHIFT CHANGES)? 8. WILL AN ATTACK GAIN SYMPATHY FOR THE TERRORISTS FROM THE POPULATION BEING SUPPORTED? 9. WHAT IS THE PERCEIVED TERRORIST THREAT POTENTIAL FOR VIOLENCE AND THE LEVEL OF ANTICIPATED VIOLENCE (SUCH AS PERSONAL ATTACKS, AMBUSHES, OR KIDNAPPING USING SMALL ARMS AND AUTOMATIC WEAPONS VERSUS THE USE OF WMD/NBC WEAPONRY)?
TERRAIN (AND WEATHER)	1. WHAT ARE THE STRENGTHS/WEAKNESSES OF THE UNIT AREA AND LOCAL SURROUNDINGS (SUCH AS URBAN VERSUS RURAL OR THE EXTENT OF NATURAL BARRIERS AND/OR SHIELDING [SUCH AS CAVES, RAVINES, AND BASEMENTS])? 2. WHAT ARE THE AVENUES OF APPROACH (IS TRAFFIC CANALIZED DUE TO MAN-MADE OR NATURAL TERRAIN FEATURES? DO THE AVENUES OF APPROACH AFFORD COVER AND CONCEALMENT FOR ENEMY MOVEMENT)? 3. ARE THERE OBSERVATION AREAS, DEAD SPACES, FIELDS OF FIRE, ILLUMINATION, OR NO-FIRE AREAS? 4. ARE THERE TALL BUILDINGS, WATER TOWERS, OR TERRAIN, EITHER EXTERIOR OR ADJACENT TO THE PERIMETER THAT COULD BECOME CRITICAL TERRAIN IN THE EVENT OF AN ATTACK? 5. WHEN TEAMS MUST BE DEPLOYED TO OUTLYING AREAS TO ACCOMPLISH THE MISSION (SUCH AS PROVIDING FHA TO VILLAGES WITHOUT MEDICAL RESOURCES), WHAT IS THE CONDITION OF THE ROADS AND TERRAIN THAT MUST BE TRAVERSED (SUCH AS PAVED ROADS OR UNIMPROVED DIRT TRACKS)? ARE AVIATION ASSETS REQUIRED? WHAT IS THE POTENTIAL FOR ATTACK WHILE IN TRANSIT? 6. ARE WEATHER CONDITIONS CONDUCIVE TO THE USE OF BW AND CW AGENTS?
TROOPS	1. DETERMINE WHAT THE FRIENDLY SITUATION IS. 2. ARE OTHER US, ALLIED, COALITION, OR HN FORCES AND EQUIPMENT AVAILABLE? 3. ARE MILITARY POLICE, ENGINEERS, OR OTHER COMBAT/CS RESOURCES AVAILABLE TO PROVIDE FORCE PROTECTION FOR DEPLOYED MEDICAL UNITS/ELEMENTS? 4. ARE THERE MWD TEAMS AVAILABLE TO CONDUCT SEARCHES FOR EXPLOSIVE MATERIALS IN THE UNIT AREA? 5. WHAT ARE THE HN'S RESPONSIBILITIES, CAPABILITIES, AND ATTITUDES TOWARD PROVIDING ASSISTANCE?

Table H-1. Mission, Enemy, Terrain and Weather, Troops and Support Available, Time Available, and Civil Considerations and Political Planning Factors (Continued)

TROOPS (CONTINUED)	6. WHAT ARE THE ROE?
TIME	1. WHAT IS THE DURATION OF THE MISSION? 2. ARE THERE TIME CONSTRAINTS? 3. WILL THERE BE SUFFICIENT TIME TO CONSTRUCT FORCE PROTECTION FACILITIES (SUCH AS BARRIERS AND FENCES AND THE INSTALLATION OF LIGHTS)? 4. WHAT IS THE OPTEMPO (SUCH AS CONTINUOUS OPERATIONS)?
CIVILIAN CONSIDERATIONS AND POLITICAL PLANNING FACTORS	1. ARE THERE HN CONCERNS OR ATTITUDES WHICH WILL IMPACT ON THE SITUATION? 2. WILL THE SITUATION BE INFLUENCED BY THE EXISTENCE OF ANY RELIGIOUS, ETHNIC, OR CULTURAL CONCERNS? 3. IS THE ACCOMPLISHMENT OF THE HSS MISSION ALLEVIATING PART OF THE REASON FOR THE UNREST WITHIN THE COUNTRY (SUCH AS BETTER ACCESS TO HEALTH CARE OR CURBING MORBIDITY AND MORTALITY RATES FOR CHILDREN)? 4. IS ASSISTANCE AVAILABLE FROM NGOs OR INTERNATIONAL ORGANIZATIONS (SUCH AS THE UN)? 5. WHAT TYPE OF MEDICAL CARE WILL BE PROVIDED TO HN AND/OR OTHER CIVILIANS (SUCH AS PERMITTING HN CIVILIANS TO ENTER THE BASE/UNIT AREA FOR MEDICAL ASSESSMENTS FOR EMERGENCY CARE TO STABILIZE LIFE-, LIMB-, OR EYESIGHT-THREATENING MEDICAL CONDITIONS [REFER TO APPENDIX F FOR A DISCUSSION OF ELIGIBILITY FOR CARE])?

APPENDIX I

SPECIAL MEDICAL AUGMENTATION RESPONSE TEAMS

I-1. Introduction

a. This appendix contains brief descriptions of SMARTs. These teams provide a rapidly available asset to complement the need to cover the full spectrum of military medical response locally, nationally, and internationally. These teams are organized by the USAMEDCOM and its subordinate commands; they are not intended to supplant TOE units assigned to US Army Forces Command (USAFORSCOM) or other major commands. The USAMEDCOM, RMCs, USACHPPM, USAMRMC, and US Army Veterinary Command (USAVETCOM) commanders organize SMARTs using their TDA assets. These teams enable the commander to field standardized modules in each of the SMART functional areas to meet the requirements of the mission.

b. The types of SMARTs include—

- Trauma/Critical Care (SMART-TCC).
- Nuclear/Biological/Chemical (SMART-NBC).
- Stress Management (SMART-SM)
- Medical Command, Control, Communications, and Telemedicine (SMART-MC3T).
- Pastoral Care (SMART-PC)
- Preventive Medicine/Disease Surveillance (SMART-PM).
- Burn (SMART-B).
- Veterinary (SMART-V).
- Health Systems Assessment and Assistance (SMART-HS).
- Aeromedical Isolation (SMART-AIT).

c. These teams provide military support to civil authorities during disasters, CMO, and humanitarian and emergency services incidents occurring in the US, its territories and possessions, and OCONUS unified commands AORs.

I-2. Responsibilities

a. As stated above, the SMARTs will be standardized and formalized within the TDA assets of the USAMEDCOM and its subordinate commands. The responsibilities for organizing, training, and equipping these SMARTs are as follows:

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(1) Headquarters, Department of the Army, The Surgeon General (HQDASG)/USAMEDCOM, Assistant Surgeon General, Force Protection has the overall responsibility for the SMART program and is also responsible for fielding four SMART-HSs.

(2) Each RMC is responsible for fielding one each of the following teams:

- SMART-TCC.
- SMART-NBC.
- SMART-SM.
- SMART-MC3T.
- SMART-PC.

(3) The USAMRMC is responsible for fielding two each:

- SMART-B.
- SMART-HS.
- SMART-AIT.

(4) The USACHPPM is responsible for fielding three SMART-PMs.

(5) The USAVETCOM is responsible for fielding four SMART-Vs.

b. One or more teams may be deployed on a specific mission. The senior medical person deployed (unless otherwise designated) provides the HSS C2 required. He is also responsible for coordinating the teams' effort for mission accomplishment.

I-3. Requests for Assistance

Requests for assistance may be generated from numerous sources to MEDCOM. These requests are received using appropriate, recognized, and approved channels. These sources may include—

- Director of Military Support (DOMS).
- United States Joint Forces Command.

I-4. Team Composition and Specialty-Specific Equipment

a. The USAMEDCOM determines the composition of each team and identifies the specialty-specific equipment required to accomplish the mission. The composition of the team is task-organized

based on the METT-TC and medical risk analysis in order to provide the appropriate level of response and technical augmentation to civil and military authorities. This information is provided to its subordinate commands through appropriate command policy statements, directives, or SOPs.

b. These teams may be comprised of active duty military, DOD civilians, or contractors as determined by the commander.

I-5. Deployability and Continuous Operations

a. Within 12 hours of notification, the SMARTs will be alerted, issued a warning order (WARNO), and assembled; within 12 hours of the WARNO the SMARTs will be capable of deploying.

b. The SMARTs are not capable of 24-hour continuous operations. To conduct continuous operations the deployed SMARTs require augmentation/reinforcement of both personnel and materiel or support from follow-on medical specialty personnel.

I-6. Trauma/Critical Care Team

The SMART-TCC is capable of providing technical expertise to local first responders in the areas of triage, assessment, and ATM of mass casualties with severely injured casualties. When required, it may also assist in providing direct patient care using existing on-site resources and facilities. Further, this team can assess what follow-on specialty skills are required to enhance the care of the victims, provide guidance to the management staff on trauma/critical care requirements, provide consultation to other health professionals at the incident site, and assist in developing a trauma/critical care transition plan for return to normal health care operations.

I-7. Nuclear/Biological/Chemical Team

The SMART-NBC provides technical advice and support augmentation to local medical authorities in the detection, neutralization, and containment of chemical, biological, radiological or associated hazardous materials in accidental and WMD-related incidents. It also provides assistance to local authorities during crisis management and consequence management phases of an operation. This team's capabilities include—

- Technical expertise in response preparation; personal and patient protection measures; patient decontamination; and initial medical treatment and patient management.
- On-scene technical advice and support augmentation during crisis management and consequence management operations.
- Assistance to civil authorities in determining and/or acquiring follow-on medical resources, supplies, and equipment necessary to resolve the incident.

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- Assistance to authorities in developing a transition plan which facilitates an orderly return to pre-incident operations.
- Level 1 protection for team members for a 24-hour period.

I-8. Stress Management Team

The SMART-SM provides augmentation to local medical authorities in the management of stress-related casualties associated with disaster and mass casualty situations. The capabilities of the SMART-SM are to provide—

- Technical expertise in stress casualty triage, treatment, and evacuation. This includes providing initial assessment of stressors, stress responses, and psychological trauma issues; providing initial assessment of stress and mental health requirements; and, advising commanders or local medical authorities on MH and stress issues resulting from the incident.
- Assistance to civil authorities in determining follow-on specialty skills and medical resources required to resolve the incident.
- Assistance to authorities in developing a stress management transition plan which facilitates the orderly return to pre-incident operations.

I-9. Medical Command, Control, Communications, and Telemedicine Team

The SMART-MC3T provides command, control, and communications to any deployed SMARTs, as well as providing telemedicine augmentation (technical advice and support) to local medical authorities in disaster/mass casualty incidents. The capabilities of this team are to provide—

- Initial on-scene incident assessment.
- Capabilities to task-organize and call forward additional tailored teams, supplies, and equipment.
- Basic man-portable communications equipment sufficient to communicate intra- and interteam and back to the home station.
- Technical expertise and man-portable telemedicine equipment sufficient to install, operate, and maintain a rudimentary, emergency telemedicine capability from a remote site.
- Assistance to civil authorities in communicating emergency patient and provider needs and providing local authorities with medical situational awareness.

I-10. Pastoral Care Team

Upon being alerted, the team assembles and deploys within 12 hours from any of their pre-positioned sites. This team also provides professional religious augmentation (technical advice and support) to local medical authorities in the management of events, incidents, and consequences associated with critical events, trauma ministry, mass casualty ministry, and spiritual assessment.

I-11. Preventive Medicine/Disease Surveillance Team

a. The mission of the SMART-PM is to provide initial disease and OEH threat assessments. This is accomplished prior to or in the initial stages of a contingency operation, or during the early or continuing assistance stages of a disaster.

b. Although the basic SMART-PM is standardized, the SMART-PM may be tailored to the requirements of the specific mission if the Commander, USAMEDCOM, determines additional specialties are needed. It can—

- Perform on-site initial health threat assessments; perform limited and rapid health hazard sampling, monitoring, and analysis; and, health risk characterization and needs assessment for follow-on PVNTMED specialty or other medical treatment support in the AO.

- Prepare PVNTMED estimates.

- Perform analysis of, but not limited to—

- Endemic and epidemic disease indicators within the AO.

- Environmental toxins related to laboratories, production and manufacturing facilities, nuclear reactors, or other industrial operations.

- Potential NBC hazards.

- Provide medical threat information and characterize the health risk to deployed forces or civilian populations.

- Provide guidance to and assist local health authorities with surveying, monitoring, evaluating, and controlling health hazards relative to naturally occurring and man-made disasters.

c. The SMART-PM may—

- Request information from the AFMIC, WHO, and other agencies with endemic disease and environmental effects information to prepare their database for the AO.

- Request information from the CDC (in the event of a national disaster) to establish a baseline for determining the impact of the disaster.

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- Determine the need for follow-on medical specialty teams or PVNTMED detachments to definitively characterize the operational force health risks associated with domestic disasters, terrorist incidents, foreign deployments, or other contingency operations.
- Elect to use telemedicine reach back, or request assistance from appropriate domestic, foreign, or international response assets after the initial assessment is completed.
- Provide public health and environmental health engineering expertise in the areas of—
 - Environmental health.
 - Epidemiology and disease surveillance.
 - Toxicology.
 - Entomology.
 - Health physics (nuclear/radiological).
 - Industrial hygiene.
 - Water quality.
 - Clinical PVNTMED.
 - Sanitation.
 - Solid and hazardous waste management.
 - Food service sanitation.

I-12. Burn Team

The SMART-B provides technical advice and support to local medical authorities in the triage, treatment, stabilization, care, and evacuation of burn patients associated with disaster/mass casualty incidents. The capabilities of the SMART-B include providing—

- Technical expertise in burn triage, advanced burn resuscitation, trauma management, and evacuation.
- Emergency medical care using on-scene facilities and resources and backpack/hand-carried trauma kits.
- Assistance to civil authorities in determining follow-on specialty skills and medical resources required to resolve the situation.

- Assistance to authorities in developing trauma/critical care transition plan which facilitates an orderly return to health care delivery.

I-13. Veterinary Team

a. The mission of the SMART-V is to assess the degree of existing destruction and/or impending risk and to determine recommended follow-on actions relative to animal health and food safety. The SMART-V also—

- Advises local first responders on food safety and veterinary PVNTMED issues.
- Advises local first responders on triage and treatment of injured animals.
- Provides limited triage and emergency treatment of injured animals including lifesaving emergency procedures, or when appropriate, euthanasia to prevent undue suffering of those cases encountered during the assessment process.
- Provides veterinary care for MWDs (such as search and rescue dogs); when authorized, it also provides care to other government-owned and nongovernmental agencies' animals participating in the operation.

b. The SMART-V can—

- Assess food contamination and potential for foodborne illness outbreaks.
- Determine the magnitude of animal involvement in public health and zoonotic disease threat.
- Make initial assessment and recommend corrective actions.
- Provide liaison with follow-up relief organizations/agencies.
- Assist in establishing control for the AO.
- Coordinate with all known animal medicine/food safety agencies and organizations in the AO.

I-14. Health Systems Assessment and Assistance Team

The SMART-HS provides augmentation to local medical authorities in health system-wide and facility infrastructure assessment and reconstitution. The capabilities of this team include—

- Full spectrum health facility medical architecture/engineering advocacy, coordination, assessment, planning assistance, and action.

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- Technical expertise in health facility assessment and planning from facility physical plant damage assessment to health facility and systems reconstitution, repair, and maintenance.
- Assistance to civil authorities in restoring the health care delivery system using hand-carried equipment and resources.
- Assistance to authorities in developing a health facilities repair/reconstitution transition plan which facilitates orderly return to pre-incident operations.

I-15. Aeromedical Isolation Team

- a.* Upon being alerted, the team assembles and deploys within 12 hours from any of their pre-positioned sites. Provides professional aeromedical augmentation (technical advice and support) to local medical authorities in the management of events, incidents and consequences associated with transporting infected/contagious patients.
- b.* Provides a rapid response evacuation unit to any area of the world to transport a maximum of two patients simultaneously.
- c.* Provides patient care under conditions of biological contamination for soldiers or authorized civilians exposed to or infected with certain contagious and highly dangerous diseases.

APPENDIX J

FORCE HEALTH PROTECTION IN A GLOBAL ENVIRONMENT
FOR THE DIGITIZED FORCE**J-1. Introduction**

a. In a digitized environment, the HSS commander has significantly more information rapidly available to him to support the warfighter. However, he must ensure that he clearly articulates his information requirements to ensure that critical information is not lost because of information overloads.

b. One of the most important elements in planning for and conducting HSS operations is a thorough understanding of the medical threat faced by the deployed force. It is essential, therefore, for the HSS commander to conduct a comprehensive MIPB. Refer to Appendix B for additional information on MIPB.

J-2. Theater Army Medical Management Information System

The Theater Army Medical Management Information System (TAMMIS) is the current information management system used by the HSL organizations at corps and EAC. The replacement for the logistics portion of TAMMIS will be a joint system known as the Defense Medical Logistics Standard Support (DMLSS). The medical maintenance portion of TAMMIS will be replaced by Global Combat Support System-Army (GCSS-A) maintenance at Levels I through IV at some point and time in the future.

NOTE

Although TAMMIS is currently in use, this system is being phased out and should be replaced within the next three years. New funding for the improvement of the current system will no longer be appropriated.

a. Controlled accessibility is a TAMMIS feature included both to simplify the system and to increase security. During system setup, the local manager establishes each user's accessibility to the system through system setup files; the user may review only the portion of the system that pertains to his job responsibilities. The local manager can also adjust his unit's system to accommodate local requirements and the operating environment.

b. The TAMMIS has flexible communication capabilities and can relay information between units in various ways. The preferred medium is via modem; however, direct communication between computers through a local area network (LAN) or mobile subscriber equipment (MSE) may be used. When direct electronic communications links are not available, users may pass information by courier via floppy diskette, tape, or hard copy.

c. For additional information refer to FM 4-02.1 and FM 8-10-16.

J-3. Medical Communications for Combat Casualty Care

a. The medical communications for combat casualty care (MC4) system is a future system which is under development and which will lay the foundation for HSS of Force XXI and the Army, 2010 and beyond. The MRI units were designed to use the enhanced communications and digital enablers that will be available on the Army XXI battlefield. As the Army moves to the future and as long as soldiers are involved, the HSS ten functional areas must still be accomplished (Chapter 5).

b. The MC4 system will be achieved by the integration of emerging information management technologies with existing and emerging digital communications technologies. This new medical information management system will start with the individual soldier and continue throughout the health care continuum. The best way to visualize the MC4 system capability is as a piece of the Army digital computer network where all ten HSS functional areas have been digitized and this HSS information is freely shared with everyone in the Army network with a need to know. In fact, not only will the MC4 system provide Army commanders with HSS information, but it will also provide commanders with a seamless transition to the joint HSS environment. The Theater Medical Information Program (TMIP) is the software program that will deliver HSS-specific software for the MC4 system, along with standardizing software business practices DOD-wide.

J-4. System Description

The MC4 system will be a worldwide, automated HSS system, which provides HSS commanders, health care providers, and medical support providers, at all levels, with integrated medical information. The system will provide digital enablers to link, both vertically and horizontally, all ten HSS functional areas. The MC4 system will receive, store, process, transmit, and report medical C2, medical surveillance, medical treatment, medical SU, and HSL data across all levels of care. This will be achieved through the integration of a network of medical information systems linked through the Army data communications structure. The MC4 system will be developed incrementally through rapid prototyping and the spiral development process, which will process the system from limited functional capabilities to fully integrated objective capabilities.

J-5. Operational Concept

a. Soldier Level.

(1) Soldiers have long required the ability to carry medical information with them for purposes of individual readiness, continuity of care, medical surveillance, and postdeployment health care follow-up. Virtually all this critical medical information is currently documented on paper after the fact. In order to become a part of the soldier's permanent medical record, the pieces of paper must be physically transported back to the soldier's home station and then physically placed in that record. Because of weight, preparation difficulties (rain, cold, darkness), and storage limitations, it is impossible to maintain a high level of paper documentation during an operational deployment.

(2) With the MC4 system, medical information about each soldier will be entered into a local database maintained at the supporting BAS, medical company, or other MTF. This information will include the soldier's immunization status, medical deployability status, and dental deployability status. A commander, faced with a deployment, will be able to simply query the database to gain the deployability status of the entire command. Time previously spent on physically searching paper records will be available for other tasks.

(3) With the MC4 system, each soldier will be issued a personal automated patient record; it is an electronic device that will store personal information about the individual soldier. The specifications for this device are addressed in a specific DOD requirements document, which incorporates Army operational requirements into this standard joint device. The device will be used to record all of the soldier's health care events and the soldier's readiness status. Each time a soldier receives medical care or immunizations the medical history on the record will be updated. When a soldier is deployed, his personal automated patient record will contain baseline clinical data. During processing for deployment the medical staff will be able to read all of the immunization, medical, dental, and medical history data directly from the record, greatly speeding up the process. Once in an operational theater, the soldier's personal automated patient record will continue to provide a backup record of all medical events that occur during the deployment. Any medical data generated by a medical event will be entered onto the record as well as being entered into the MC4 information system. The preservation of medical data will no longer rely on the safeguarding and transporting of stacks of paper records.

(4) As part of the warrior program under the program manager soldier, a warfighter physiological status monitor (WPSM) is under development. The WPSM will be a suite of external sensors that will monitor a soldier's vital signs. These sensors will feed the vital sign information to a body-worn computer (also part of the warrior system). An artificial intelligence program on the computer will process the vital sign information and will generate an alert if the vital signs fall outside of preset ranges. This alert will be transmitted by the soldier's warrior radio to the unit platoon leader/platoon sergeant and trauma specialist, warning that the soldier may have become a casualty. In addition, the warrior system will also provide a trauma specialist alert button that the soldier can press if he requires medical assistance. The alert button will transmit a distress call to the platoon leader/platoon sergeant and trauma specialist. When either alarm is activated, the vital sign information coming from the WPSM will automatically be broadcasted to the trauma specialist as well as recorded onto the personal automated patient record. The WPSM and warfighter ensemble are currently being designed for combat troops but a CSS model has been proposed.

b. Databases. With the MC4 system, medical information on soldiers will be stored at different levels. This will allow commanders and command surgeons at the various levels to access medical information on their soldiers to find out specific information and to conduct analysis of disease/injury trends. These lower level databases also provide a means for information redundancy should an information node be destroyed or a communications outage occur. Personnel (HSS commanders and staff surgeons) at each level with the MC4 system management functionality will be able to query the database. The HSS information required by the Combat Service Support Control System (CSSCS) will pass from the MC4 system through GCSS-A or directly to CSSCS.

(1) *Personal automated patient record.* The device will contain the medical information relevant to one soldier.

(2) *Battalion aid station/forward support medical company/division support medical company/troop medical clinic/area support medical battalion/combat support hospital.* Units responsible for the treatment of soldiers will maintain a database containing medical information relevant to the soldiers that it supports.

(3) *Division surgeon/corps surgeon.* The surgeons will maintain a database containing medical information relevant to the soldiers in that division or corps respectively.

(4) *Combatant commander's surgeon.* The combatant commander's surgeon will maintain a database containing all medical information relevant to the entire theater. This will be the interim theater database (ITDB) which provides information to update sustaining base medical information systems such as the computer-based patient record and medical surveillance system and is used for medical threat and trend analysis.

c. *Level I.*

(1) *Trauma specialist.* The trauma specialist will be the first point where a casualty interfaces with the MC4 system. Each trauma specialist will be equipped with a computer capable of reading and writing to the casualty's personal automated patient record. Any medical care provided to the casualty by the trauma specialist will be recorded on the personal automated patient record. Where communication assets allow, this information will also be transmitted to the supporting BAS. Under the warrior program trauma specialists assigned to maneuver battalions will have some additional capabilities. A warrior medic version of the warrior ensemble is being developed with specific medical requirements. The warrior medic ensemble will include a body-worn computer, a Global Positioning System (GPS) locator, and a warrior radio. If a soldier's WPSM/computer system broadcasts an alert or a soldier activates his medic call button, the trauma specialist will receive these alerts and the flow of vital sign information over his warrior radio. The trauma specialist's GPS locator will allow the trauma specialist to quickly locate and reach the casualty. The trauma specialist's computer will be able to read vital signs directly from the casualty's WPSM. All of these capabilities will enhance the trauma specialist's ability to quickly detect, reach, and treat a casualty. In the event of multiple casualties, the flow of WPSM data to the trauma specialist will allow him to prioritize the casualties using remote triage in order to reach the worst injured first.

(2) *Evacuation.* If a casualty's injuries or illness require treatment beyond the trauma specialist's abilities, the casualty is evacuated to a higher level of medical care, most often the BAS. Evacuation is accomplished via dedicated medical evacuation vehicles, wheeled or tracked ambulances, and air ambulances (helicopters). During evacuation, onboard trauma specialists apply en route treatment and monitor the casualty. Digital onboard medical equipment eliminates the difficulties with manual vital signs monitoring which are oftentimes impossible. With the MC4 system, each evacuation vehicle will be equipped with an onboard computer, which will interface with the casualty's personal automated patient record. En route care received will be recorded on the automated patient record, and will also be transmitted to the destination MTF. Digital linkages to medical C2 units/MROs allow for redirecting the casualty en route should the need arise. The request for evacuation from the trauma specialist's site will be made over Force XXI Battle Command Brigade and Below (FBCB2) utilizing a built-in medical evacuation request.

(3) *Battalion aid station.* At the BAS, the casualty will receive routine or emergency resuscitative care. The medical staff will use MC4 computers to read the casualty's personal automated patient record, learning what medical care the casualty has already received and any relevant medical history. This information, along with any information generated by the treatment that the casualty receives at the BAS, will be recorded onto the local database. The information will also be transmitted to the next higher level of medical care (the FSMC) and ultimately to the ITDB.

(4) *Health service logistics.* The present HSL system at Level I is a totally manual system. Under MC4, the trauma specialist will utilize FBCB2 to request medical supplies from the BAS. This request will be a built-in report on the FBCB2 system. At the BAS, requests for medical resupply will be made utilizing the MC4 system. This automation will not only speed the resupply process, but will also allow the combat commander to maintain visibility of his unit's HSL status, either through FBCB2 or through MC4's link to CSSCS through GCSS-A.

d. Level II.

(1) At the Level II medical units (FSMCs and DSMCs), the MC4 system will provide the same augmentations to treatment documentation, evacuation, and HSL that will be seen at Level I. Through the use of the medical detachment, telemedicine (MDT), Level II medical companies will have the ability to digitize medical data (x-rays, pictures, and so forth) and transmit it to medical experts at echelons above division. This teleconsultation ability will result in some casualties being treated farther forward in the theater, will increase the RTD rate, and will reduce overevacuation.

(2) The Medical Materiel Management Branch (MMMB) at the Division Materiel Management Center (DMMC) is the Class VIII commodity manager and, using the same automated tools as the other commodity managers, makes arrangements to fill the request through the battlefield distribution system. The MC4 system will automate linkage of Class VIII to the transportation system. The management of the complex MESs along with the quality control of Class VIII material is also automated, improving efficiency over the current manual system. The joint software design supports the Army support to other Services mission of Army HSL units.

e. Levels III and IV. These levels contain hospitals and all of the specialized medical units required to support the theater. The MC4 system will link all of these medical functions. The MC4 system will equip corps treatment and evacuation teams with personally carried and mobile computers for the collection and forwarding of medical information to the FSMC, MSMC, or ASMC. Likewise, COSC teams, veterinary teams, dental teams, and PVNTMED teams operating in the brigade rear area will be equipped with personally carried or mobile computers. These MC4 provided devices will be loaded with the appropriate software functionality. Corps/theater MROs/medical C2 will be able to rapidly and accurately match treatment capability with the soldier's need for care. The MC4 corps medical regulating system (TRANSCOM Regulating and Command and Control Evacuation System [TRAC2ES]) provides this functionality via Warfighter Information Network (WIN). A seamless Class VIII (including blood) automated system links the theater to the CONUS sustaining base.

f. Command and Control. At all levels, the MC4 system will automatically provide information, such as evacuation status, current fitness for combat, and hazard exposure information, to the commander's

SU system. The MC4 system will provide the commander with the ability to track and record the date and location of exposure to health hazards, which include environmental, occupational, industrial, and NBC hazards. This information is critical to the medical force protection health hazard analysis which is required to identify emerging DNBI problems and trends and to develop PVNTMED measures to counter the medical threat. Commanders will have real-time information on food source safety/quality, operationally significant zoonotic diseases, health surveillance/trends, and near real-time health hazard assessment data for NBC/endemic disease threats and occupational or environmental health threats. This information will be provided to the HSS commander from the MC4 system functional digital systems through GCSS-A to CSSCS. Commanders, for the first time, will have a complete picture of the battlefield, which will allow them to accurately influence current operations while synchronizing HSS with other activities.

g. Level V. All care/exposure information will be digitally stored. The documentation of immunizations, for example, will eliminate challenges that have surfaced postdeployment for vaccines such as anthrax and botulism. This information is stored not only in the Level I database supporting the soldier, but is transmitted to the ITDB and the soldier's permanent computerized record. The digital documentation of medical treatment/exposure information will make addressing health exposure issues, as seen in the Gulf War and more recent deployments, much easier.

GLOSSARY

ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

> greater than

< less than

A2C2 Army airspace command and control

A&D admission and disposition

AAFES Army and Air Force Exchange Service

ABCA American, British, Canadian, and Australian

AC active component/cyanide

ACOS American College of Surgeons

ACR armored cavalry regiment

ACSA Acquisition and Cross Servicing Agreement

adequate care Health care sufficient to provide the lowest possible mortality and morbidity rates for wounded in action and nonbattle injury casualties in the theater force. Initial resuscitation should be prompt, adequate, and at the point of injury or as far forward as tactically feasible. Those soldiers who are wounded in action or suffering from nonbattle injury will be treated and evacuated as expeditiously as possible to the level of care required for initial wound therapy. Initial wound surgery will consist of those procedures to stabilize neurological, vascular, bone and joint wounds and injuries. Initial wound surgery for the less severe injuries may permit return to duty within the stated theater evacuation policy. If not capable of returning to duty within the evacuation policy, patients should be evacuated to a level of care capable of providing definitive care.

admin administrator

advanced trauma management (ATM) Resuscitative and stabilizing medical or surgical treatment provided to patients to save life or limb and to prepare them for further evacuation without jeopardizing their well-being or prolonging the state of their condition.

AE aeromedical evacuation

AFMIC Armed Forces Medical Intelligence Center

AI area of interest

AIDS acquired immunodeficiency syndrome

AMEDD Army Medical Department

AML area medical laboratory

AO See area of operations.

AOE Army of Excellence

AOR area of responsibility

AR Army regulation

area of operations (AO) That portion of an area of conflict necessary for military operations. Areas of operations are geographical areas assigned to commanders for which they have responsibility and in which they have authority to conduct military operations.

ARF acute respiratory failure

ARSOF Army special operations forces

ASBPO Armed Services Blood Program Office

ASCC Army Service Component Command

ASD(HA) Assistant Secretary of Defense (Health Affairs)

ASF aeromedical staging facility

ASMB area support medical battalion

ASMC area support medical company

ASMD area support medical detachment

assign To place units or personnel in an organization where such placement is relatively permanent, and/or where such organization controls, administers, and provides logistical support to units of personnel for the primary function or a greater portion of the functions of the unit or personnel. (See also attached; operational command; operational control; organic.)

ASTS aeromedical staging squadron

ASWBPL Armed Services Whole Blood Processing Laboratory

attach The temporary placement of units or personnel in an organization. Subject to limitations imposed by the attachment order, the commander of the formation, unit or organization receiving the attachment will exercise the same degree of command and control as he does over units and personnel organic to his command. However, the responsibility for transfer and promotion of personnel will normally be retained by the parent formation, unit, or organization. (See also assign; operational command; operational control; organic.)

ATM See advanced trauma management.

attn attention

augmentation (1) The addition of specialized personnel and/or equipment to a unit, aircraft, or ship to supplement the medical evacuation mission. (2) The provision of personnel to accomplish task/mission that organic personnel cannot accomplish in addition to their primary mission (example: Nonmedical personnel detailed to a medical treatment facility to perform patient decontamination.)

AVSMC aviation support medical company

AXP ambulance exchange point

BAS battalion aid station

battle fatigue (BF) Also referred to as combat stress reaction or combat fatigue. Fatigue by definition is the distress and impaired performance that comes from doing something (anything) too hard and/or too long. The term battle fatigue is applied to any combat stress reaction which is treated the way all fatigue is treated, with the four “Rs”—**R**eassure of normality, **R**est (respite from the work), **R**estoration of confidence through talk and activities, and **R**eplenish of nutrition, and hydration, hygiene and a sense of physical well-being.

bed-to-bed move Movement from a hospital (Level III or IV) to another hospital (Level III, IV, or V) bed at the same or higher level of care. Requires transportation from the originating hospital to an aeromedical staging facility, a wait there for an aircraft (or land or sea transportation), loading the aircraft (or other mode), reception at the destination transportation node, and transportation to the receiving hospital. Planning assumptions are that an intratheater bed-to-bed move requires up to 24 hours.

BF See battle fatigue.

biological warfare agent A biological warfare agent is a pathogen (microorganism capable of causing disease) or toxin derived from a living organism that is deliberately used to produce disease or death in humans, animals, or plants.

BOS battlefield operating system

BSA body surface area

BSMC brigade support medical company

BW biological warfare

C2 See command and control.

C3IC coalition coordination, communications, and integration center

C4I command, control, communications, computers, and intelligence

camouflage The use of concealment and disguise to minimize detection or identification of troops, weapons, equipment, and installations. It includes taking advantage of the immediate environment as well as using natural and artificial materials.

CASEVAC See casualty evacuation.

casualty evacuation (CASEVAC) (1) This is the term used by nonmedical units to refer to the movement of casualties aboard nonmedical vehicles or aircraft. En route medical care is not provided. (2) Casualty evacuation is a term used by nonmedical units to refer to the movement of casualties aboard nonmedical vehicles or aircraft. Casualties transported in this manner do not receive en route medical care.

CBRNE chemical, biological, radiological, nuclear, and high-yield explosive

cc cubic centimeters

CCAT critical care air transport

CCIR commander's critical information requirements

CCM critical care management

CCP casualty collecting point(s) (*See also* collecting point(s) [patient or casualty].)

CDC Centers for Disease Control and Prevention

chemical warfare agent A chemical substance which, because of its physiological, psychological, or pharmacological effects, is intended for use in military operations to kill, seriously injure, or incapacitate humans (or animals) through its toxicological effects. Excluded are riot control agents, chemical herbicides, and smoke and flame materials. Chemical agents are nerve agents, incapacitating agents, blister agents (vesicants), lung-damaging agents, blood agents, and vomiting agents.

CHL combat health logistics

CHPPM Center for Health Promotion and Preventive Medicine

CHS combat health support

CIA Central Intelligence Agency

CJCS Chairman, Joint Chiefs of Staff

CLS See combat lifesaver.

CMO civil-military operations

CMS central material supply

COA course of action

collecting point(s) (patient or casualty) (CCP) (1) A specific location where casualties are assembled to be transported to an MTF; for example, a company aid post. (2) A specific location where casualties are assembled to be transported to a medical treatment facility. It is usually predesignated and may be either staffed or not. The level designating the point provides the staffing.

combat lifesaver (CLS) Is a nonmedical soldier trained to provide enhanced first aid as a secondary mission. Enhanced first aid procedures include, but are not limited to, initiating an intravenous infusion, administering additional nerve agent antidote, and inserting an oropharyngeal airway. Normally, one member of each squad, team, or crew is trained.

combat operational stress control (COSC) A coordinated program for the prevention, triage and treatment of each level of battle fatigue to maximize rapid return to duty and minimize misconduct stress reactions and post-traumatic stress disorders. This program is conducted by unit mental health personnel plus echelon above division combat stress control units.

- combat service support** (1) The support provided to sustain combat forces, primarily in the fields of administration and logistics. It may include personnel support, religious support, finance support, legal service and support, civil affairs, food service, maintenance, health service support, military police, supply, transportation, and other logistical services. The basic mission of combat service support is to maintain and support our soldiers and their weapon systems. (2) The assistance provided to sustain combat forces, primarily in the fields of administration and logistics. It includes administrative services, chaplain services, civil affairs, food service, finance, legal services, maintenance, combat health support, supply, transportation, and other logistical services. (3) The essential capabilities, functions, activities, and tasks necessary to sustain all elements of operating forces in theater at all levels of war. Within the national and theater logistic systems, it includes but is not limited to the support rendered by Service forces in ensuring the aspects of supply, maintenance, transportation, health services, and other services required by aviation and ground combat troops to permit those units to accomplish their missions in combat. Combat service support encompasses those activities at all levels of war that produce sustainment to all operating forces on the battlefield. (Joint Pub 1-02)
- combat support (CS)** Fire support and operational assistance provided to combat elements. May include artillery, aviation, military police, signal, and electronic warfare.
- combat zone (CZ)** (1) That area required by combat forces for the conduct of operations. It is the territory forward of the Army rear area boundary. (2) That area required by combat forces for the conduct of operations. (Joint Pub 1-02)
- combatant command** A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities. (Joint Pub 1-02)
- combatting terrorism** Actions, including antiterrorism (defensive measures taken to reduce vulnerability to terrorist acts) and counterterrorism (offensive measures taken to prevent, deter, and respond to terrorism) taken to oppose terrorism throughout the entire threat spectrum.
- command and control (C2)** The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. (Joint Pub 1-02)
- command and staff channels** These channels clearly identify the official relationship of commands and staffs and the flow of information as commander to commander, staff to staff, and technical activity to technical activity. (*See also* command channel; staff channel; technical channel; and FM 101-5).
- command channel** This channel is the direct, official link between headquarters and commanders. All orders and instructions to subordinate units pass through this channel. Within your authority, you use command channels when acting in the commander's name.
- command post** The principal facility employed by the commander to command and control combat operations. A command post consists of those coordinating and special staff activities and representatives from supporting Army elements and other services that may be necessary to carry out operations. Corps and division headquarters are particularly adaptable to organization by echelon into a tactical command post, a main command post, and a rear command post.
- commander in chief** A commander of a joint, specific, or unified command with responsibility for operational and tactical execution of military operations supporting defined national security

objectives. Commanders in chief command joint military forces to determine requirements and develop and execute military plans.

communications zone (COMMZ) Rear part of a theater of operations (behind but contiguous to the combat zone) which contains the lines of communications, establishments for supply and evacuation, and other agencies required for the immediate support and maintenance of the field forces.

COMMZ See communications zone.

concept of operations A graphic, verbal, or written statement in broad outline that gives an overall picture of a commander's assumption or intent in regard to an operation or a series of operations; includes, at a minimum, the scheme of maneuver and the fire support plan. The concept of operations is embodied in campaign plans and operation plans, particularly when the plans cover a series of connected operations to be carried out simultaneously or in succession. It is described in sufficient detail for the staff and subordinate commanders to understand what they are to do and how to fight the battle without further instructions.

continuity of care Attempt to maintain the level of care during movement between echelons (levels) at least equal to the level of care at the originating echelon (level).

CONUS continental United States

COSC See combat operational stress control.

COTS Committee on Trauma Surgery

country team The executive committee of an embassy, headed by the Chief of Mission, and consisting of principal representatives of the government departments and agencies present (for example, the Departments of State, Defense, Treasury, Commerce, and the US Information Agency, US Agency for International Development, Drug Enforcement Agency, and Central Intelligence Agency).

CRTS casualty receiving and transport ship

CS See combat support.

CSH combat support hospital

CSS See combat service support.

CSSCS Combat Service Support Control System

CT computed tomography

CW chemical warfare

CZ See combat zone.

D&D dated and deteriorative

DA Department of the Army

DACMC division air cavalry medical company

DCAS dental company, area support

DD Department of Defense

DE directed energy

DEA Drug Enforcement Agency

definitive care (1) That care which returns an ill or injured soldier to full function, or the best possible function after a debilitating illness or injury. Definitive care can range from self aid when a soldier applies a dressing to a grazing bullet wound that heals without further intervention, to two weeks bed-rest in theater for Dengue fever, to multiple surgeries and full rehabilitation with a prosthesis at a continental United States medical center or Department of Veterans Affairs hospital after a traumatic amputation. Doctrinally, definitive care is delivered at the lowest possible level.

(2) That treatment required to return the service member to health from a state of injury or illness. The service member's disposition may range from return to duty to medical discharge from the military. It can be provided at any level depending on the extent of the service member's injury or illness. It embraces those endeavors which complete the recovery of the patient. It is not hampered by the crisis aspects of resuscitative care.

definitive treatment The final level of comprehensive care provided to return the patient to the highest degree of mental and physical health possible. Definitive treatment is not associated with a specific role (level) or location in the continuum of care; it may occur in different roles (levels) depending upon the nature of the injury or illness. After the definitive treatment period the individual may undergo rehabilitation before being returned to duty or discharged from the military service.

den dental

dental care There are two categories of dental care—operational care and comprehensive care. (1) *Operational care* is provided in the theater of operations and consists of two types of dental care. (a) *Emergency dental care* is given for the relief of oral pain, elimination of acute infection, control of life-threatening oral conditions (hemorrhage, cellulitis, or respiratory difficulty) and treatment of trauma to teeth, jaws, and associated facial structures. It is the most austere type of care and is available to soldiers engaged in tactical operations. Common examples of emergency treatments are simple extractions, administration of antibiotics, pain medicines, and temporary fillings. (b) *Essential dental care* includes dental treatment necessary to intercept potential emergencies. This type of operational care is necessary for the prevention of lost duty time and preservation of the fighting strength. It is also intended to maintain the overall oral fitness of soldiers at a level consistent with combat readiness. Most dental disease is chronic and recurring. A soldier's oral health status will deteriorate from the day of deployment if essential dental care is not provided. The scope of services includes minor oral surgery, definitive restorative, exodontic, periodontal, and prosthodontic procedures as well as prophylaxis. This is the highest type of dental care provided within the theater of operations. (2) *Comprehensive care* is dental treatment to restore an individual to optimal oral health, function, and esthetics.

DEPMEDS deployable medical systems

DIA Defense Intelligence Agency

died of wounds (received in action) This term describes battle casualties who die of wounds or other injuries received in action after having reached a medical treatment facility. These cases differ from battle casualties who are found dead or who die before reaching a medical treatment facility (the killed in action group). The criterion is to reach a medical treatment facility while still alive. All cases counted as DOW received in action are also counted as wounded in action.

direct support (DS) A direct support unit gives priority of support to a specific unit or force. The supporting unit takes support requests directly from the unit or force in need of support. The supporting unit normally establishes liaison and communications; it also provides advice to the supported unit. A unit in direct support has no command relationship with the supported unit or force.

directed energy An umbrella term covering technologies that relate to the production of a beam of concentrated electromagnetic energy or atomic or subatomic particles. (Joint Pub 1-02)

DIS disease

DISCOM division support command

disease and nonbattle injury casualty (DNBI) A person who is not a battle casualty but who is lost to the organization by reason of disease or injury, including persons dying of disease or injury, by reason of being missing where the absence does not appear to be voluntary, or due to enemy action or to being interned. (Joint Pub 1-02)

DLA Defense Logistics Agency
DMLSS Defense Medical Logistics Standard Support
DMMC division materiel management center
DMSB Defense Medical Standardization Board
DNBI disease and nonbattle injury (*See also* disease and nonbattle injury casualty.)
DOD Department of Defense
DODD Department of Defense Directive
DODI Department of Defense Instructions
DOMS Director of Military Support
DOS days of supply
DOTMLPF doctrine, organizations, training, materiel, leadership and education, personnel, and facilities
DS *See* direct support.
DSB division support battalion
DSMC division support medical company
DSN digital switching network
DSO domestic support operations
DTSMC division troop support medical company

EAC *See* echelons above corps.

echelons above corps (EAC) Army headquarters and organizations that provide the interface between the theater commander (joint or combined) and the corps for operational matters, and between the continental United States/host nation and the deployed corps for combat service support. Operational echelons above corps may be United States only or allied headquarters, while echelons above corps for combat service support will normally be United States national organizations.

EEFI *See* essential elements of friendly information.

EEI essential elements of information

emergency medical treatment (EMT) The immediate application of medical procedures to the wounded, injured, or sick by specially trained medical personnel.

EMS emergency medical service

EMT *See* emergency medical treatment.

en route care The care required to maintain the phased treatment initiated prior to evacuation and the sustainment of the patient's medical condition during evacuation.

EPW enemy prisoner(s) of war

essential care (1) Medical care and treatment within the theater of operations and which METT-T dependent. Includes first responder care, initial resuscitation and stabilization as well as treatment and hospitalization. Forward care may include stabilizing surgery to ensure the patient can tolerate further evacuation as well as en route care during evacuation. The objective is to either return the patient to duty within the theater evacuation policy, or to begin initial treatment required for optimization of outcome. (2) Medical care and treatment within the theater of operations and which METT-T dependent. Includes first responder care, initial resuscitation and stabilization as well as treatment and hospitalization. Forward care may include stabilizing surgery to ensure the patient can tolerate further evacuation as well as en route care during evacuation. The objective is to either return the patient to duty within the theater evacuation policy, or to begin initial treatment required for optimization of outcome.

essential care in theater (1) That care which is required to return soldiers to duty within the theater evacuation policy or to enable evacuation from the theater as a stable or stabilized patient. In an immature theater, evacuation of all categories of patients (stable, unstable, stabilized) out of theater may be required to keep adequate bed capacity available, even though the patients could have been returned to duty within the theater evacuation policy. (2) That care received within the theater of operations which is mission, enemy, terrain, troops, time available, and civilian considerations dependent. It includes first responder care, forward resuscitative surgery, and en route care as well as treatment and hospitalization to return the patient to duty or to stabilize for movement to the next higher level. (3) Medical treatment and care provided within the theater of operations. This includes resuscitative care and en route care, as well as care to either return the patient to duty (within the theater evacuation policy) or begin initial treatment required for optimization of outcome and/or ensure the patient can tolerate evacuation to the next level of care.

essential elements of friendly information (EEFI) The critical aspects of a friendly operation that, if known by the enemy, would subsequently compromise, lead to failure, or limit success of the operation and, therefore, must be protected from enemy detection.

ET endotracheal tube

evac evacuation

evacuation delay Represents the number of days after admission that a patient who has been identified for evacuation must wait before actually being evacuated. Both patient stabilization requirements and evacuation transportation availability are taken into account.

★**evacuation precedence** This precedences are somewhat different depending upon the parent Service. The US Air Force precedences are Urgent, Priority, and Routine. The US Army precedences are URGENT, URGENT-SURG, PRIORITY, ROUTINE, and CONVENIENCE.

FBCB2 Force XXI Battle Command Brigade and Below

FARP forward arming and refueling point

- FDA** Food and Drug Administration
- FEBA** forward edge of battle area
- FEMA** Federal Emergency Management Agency
- FFIR** friendly forces information requirements
- FFP** fresh frozen plasma
- FH** field hospital
- FHA** foreign humanitarian assistance
- FHP** force health protection
- FHPGE** *See* force health protection in a global environment.
- field discipline** Field discipline is the component of protection. It guards soldiers from the physical and psychological effects of the environment. Commanders take every measure and precaution to keep soldiers healthy and maintain their morale. Such actions include securing equipment and supplies from loss of damage; providing adequate combat health support, returning minor casualties to duty as quickly as possible, and providing preventive medicine services. The provide effective systems for maintenance evacuation and rapid replacement or repair of equipment. (*See also* protection.)
- first aid (self-aid/buddy aid)** Urgent and immediate lifesaving and other measures which can be performed for casualties (or performed by the victim himself) by nonmedical personnel when medical personnel are not immediately available.
- first responder** (1) This capability can be divided into nonmedical (meaning first aid) and medical first responders. Medical first responders are able to provide basic trauma management (including needle thoracostomy and needle cricothyroidotomy) at the point of wounding or injury as well as limited primary health care and preventive medicine services. It primarily refers to the close medical support provided to combat troops on operations by members such as combat medics and combat medical assistants (USMC) but also includes the care provided by the medical evacuation personnel who retrieve the patient from point of wounding or injury. (2) Is the first person on the scene to help a casualty.
- FM** field manual
- FOB** forward operating base
- force health protection in a global environment (FHPGE)** Is executed by the health service support system and includes all support and services performed, provided, or arranged by the AMEDD to promote, improve, conserve, or restore the mental or physical well-being of personnel in the Army and, as directed, in other Services, agencies, and organizations.
- force protection** Force protection consists of those actions to prevent or mitigate hostile actions against DOD personnel (including family members), resources, facilities, and critical information. It coordinates and synchronizes active and passive (offensive and defensive) measures to enable the force to perform while degrading the opportunities for the enemy. Force protection includes air, space, and missile defense; NBC defense; antiterrorism; defensive information operations; and security to operational forces and means. Force protection does not include actions to protect against accidents, weather, and disease. It is the commander's responsibility to ensure that force protection measures are planned for and executed. (*See also* protection.)
- forward resuscitative surgery** The forward resuscitative surgery phase is the urgent initial surgery required to render a patient transportable for further evacuation to a medical treatment facility staffed and equipped to provide for his care. Forward resuscitative surgery is performed on patients with signs and symptoms of initial airway compromise, difficult breathing, and circulatory

shock and who do not respond to initial emergency medical treatment and advanced trauma management procedures.

forward surgical team Is the first medical element capable of performing surgery on life-threatening wounds. The forward surgical team is employed in direct support of maneuver units. It is collocated with divisional medical companies and is organic to airborne, air assault, and armored cavalry divisions/regiment.

fragmentary order An abbreviated form of an operation order used to make changes in mission to units and to inform them of changes in the tactical situation. **Fratricide avoidance** Fratricide avoidance is the fourth component of protection. Fratricide is the unintentional killing or wounding of friendly personnel by friendly firepower. Commanders seek to lower the probability of fratricide without discouraging boldness and audacity. Situational understanding, positive weapons control, control of troop movements, use of identification methods, and disciplined operational procedures coupled with good leadership can do this. (*See also* protection.)

FRP Federal Response Plan

FSB forward support battalion

FSMC forward support medical company

FST forward surgical team

G1 Assistant Chief of Staff (Personnel)

G2 Assistant Chief of Staff (Intelligence)

G5 Assistant Chief of Staff (Civil-Military Operations)

GC Geneva Convention Relative to the Protection of Civilian Persons in Time of War

GCS Glasgow Coma Score

GCSS-A Global Combat Support System-Army

general support A general support unit provides support to the total force, not to any particular subdivision. Therefore, subdivisions may not directly request support from the general support unit. Only the supported force headquarters may determine priorities and assign missions or tasks to the general support unit. A general support unit has no command relationship with the supported unit or force.

GH general hospital

GI gastrointestinal

Global Patient Movement Requirements Center (GPMRC) (1) A joint activity reporting directly to the Commander in Chief, US Transportation Command, the Department of Defense single manager for the regulation of movement of uniformed services patients. The Global Patient Movement Requirements Center authorizes transfers to medical treatment facilities of the Military Departments or the Department of Veterans Affairs and coordinates intertheater and inside continental United States patient movement requirements with the appropriate transportation component commands of United States Transportation Command. (Joint Pub 1-02) (2) The GPMRC is a joint agency located in the continental United States and established by the US Transportation Command. The GPMRC receives requests from the TPMRC. The primary role of the GPMRC is to apportion intertheater assets to the TPMRCs, collaborate and integrate proposed TPMRC intertheater plans and schedules, and communicate lift and bed requirements. The destination hospital is determined based on the patient's medical needs and the available transportation resources. (*See also* Theater Patient Movement Requirements Center.)

GPMRC *See* Global Patient Movement Requirements Center.

- GPS** global positioning system
- GPW** Geneva Convention Relative to the Treatment of Prisoners of War
- GWS** Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field
- GWS (Sea)** Geneva Convention for the Amelioration of the Condition of the Wounded, Sick, and Shipwrecked Members of the Armed Forces at Sea
- Gy** gray
- HAZMAT** hazardous material
- HD** sulfur mustard (a blister agent)
- health service support (HSS)** (1) The system which executes the force health protection in a global environment concept and includes all services performed, provided, or arranged to promote, improve, conserve, or restore the mental or physical well being of personnel in the Army. (2) The joint medical community also uses the term health service support to describe the joint military health system.
- health threat** Refers to an individual soldier's health. The term can include hereditary conditions which manifest themselves in adulthood, individual exposure to an industrial chemical or toxin where others are not exposed, or other injuries and traumas which affect an individual's health rather than the health of the unit. A *health threat* may be more individualized in nature and may not be of military significance. (See also medical threat.)
- Hg** mercury
- HIV** human immunodeficiency virus
- HN** See host nation.
- HNS** See host nation support.
- hosp** hospitalization See hospital.
- hospital (hosp)** A medical treatment facility capable of providing inpatient care. It is appropriately staffed and equipped to provide diagnostic and therapeutic services, as well as the necessary supporting services required to perform its assigned mission and functions. A hospital may, in addition, discharge the functions of a clinic. (Joint Pub 1-02)
- host nation (HN)** A nation which receives the forces and/or supplies of allied nations and/or NATO to be located on, or to operate in, or to transit through its territory.
- host-nation support (HNS)** (1) Civil and military assistance rendered in peacetime and in wartime to allied forces and organizations located in the host nation's territory. The bases of such assistance are commitments arising from national agreements concluded among host nation(s), international organizations, and nation(s) having forces operating in the host nation's territory. (2) Civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, crisis or emergencies, or war based upon agreements mutually concluded between nations. (Joint Pub 1-02)
- HQDASG** Headquarters, Department of the Army, The Surgeon General
- HSL** health service logistics
- HSS** See health service support.
- humanitarian assistance** Is provided by DOD forces, as directed by appropriate authority, in the aftermath of natural or man-made disasters to help reduce conditions that present a serious threat to life and property. Assistance provided by US forces is limited in scope and duration and is designed to supplement efforts of civilian authorities that have primary responsibility for providing such assistance.

ICRC International Committee of the Red Cross

ICT integrated concept team

ICU intensive care unit

ICW intermediate care ward

ID identification

IDIV interim division

IDP internally displaced person

IND investigational new drug

information requirements Those items of information regarding the enemy and his environment which need to be collected and processed in order to meet the intelligence requirements of a commander.

infrastructure In an insurgency, the leadership organization and its system for command and control. In a broader sense, the systems of communications and the institutions which support the political and economic functions of a society.

initial point of treatment Any point within the combat health support system at which a soldier is seen and treated by trained medical personnel.

initial resuscitation The very first state of reviving a patient from apparent death or unconsciousness.

initial surgery Initial surgery renders the casualty *transportable* via rapid evacuation to a hospital for reparative surgery. The initial surgery effort at the forward element (forward surgical team), by definition, is not complete, but rather the initial effort required to save life and limb, prevent infection, and render the casualty transportable.

injury A term comprising such conditions as fractures, wounds, sprains, strains, dislocations, concussions, and compressions. In addition, it includes conditions resulting from extremes of temperature or prolonged exposure. Acute poisonings, except those due to contaminated food, resulting from exposure to a toxic or poisonous substance are also classed as injuries.

inpatient Is the term applied to a person admitted to and treated within an Levels III through V hospital and who cannot be returned to duty within the same calendar day.

intelligence The product resulting from the collection, evaluation, analysis, integration, and interpretation of all available information concerning an enemy force, foreign nations, or areas of operations, and which is immediately or potentially significant to military planning and operations. (*See also* medical intelligence.)

intelligence preparation of the battlefield A systematic approach to analyzing the enemy, weather, and terrain in a specific geographic area. It integrates enemy doctrine with the weather and terrain as they relate to the mission, and the specific battlefield environment. This is done to determine and evaluate enemy capabilities, vulnerabilities, and probable courses of action.

interagency operations Any action that combines the human and material resources of two or more independent organizations, whether they are governmental, international, or private, in the prosecution of a common objective.

intertheater evacuation Evacuation of patients between the originating theater and points outside the theater, to include the continental United States and other theaters. En route care is provided by trained medical personnel. (Joint Pub 1-02)

interoperability The ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces and to use the services so exchanged to enable them to operate effectively together.

intratheater evacuation Evacuation of patients between points within the theater. En route care is provided by trained medical personnel. (Joint Pub 1-02)

IPT integrated product team
ISA international standardization agreement
ISB intermediate staging base
ITDB interim theater database
ITO invitational travel orders
IV intravenous

JBPO joint blood program office
JCAHO Joint Commission on the Accreditation of Hospital Organizations
JCS Joint Chiefs of Staff
JFC joint force commander
JFS joint force surgeon
JHSS joint health service support

joint force A general term applied to a force composed of significant elements, assigned or attached, of two or more Military Departments, operating under a single joint force commander. (Joint Pub 1-02)

joint force commander A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. (Joint Pub 1-02)

joint force surgeon A general term applied to an individual appointed by the joint force commander to serve as the theater or joint task force special staff officer responsible for establishing, monitoring, or evaluating joint force health service support. (Joint Pub 1-02)

JRCAB Joint Readiness Clinical Advisory Board

JSOTF joint special operations task force

JTF joint task force

JV Joint Vision

killed in action A casualty category applicable to a hostile casualty, other than the victim of a terrorist activity, who is killed outright or who dies as a result of wounds or other injuries before reaching a medical treatment facility. Killed in action cases are not included in the wounded in action category of the died of wounds category. (Joint Pub 1-02)

lab laboratory

LAN local area network

leapfrog Form of movement in which like supporting elements are moved successively through or by one another along the axis of movement of supported forces.

levels of care is synonymous with *roles of care and echelons of care*. The levels of care are characterized by capabilities and not geographical location within the theater of operations. There are five levels of care—(1) Level I—Unit-level first medical care a soldier receives is provided at this level. This care includes immediate lifesaving measures, advanced trauma management, disease prevention, combat operational stress control prevention, casualty collection, and evacuation from supported units to supporting medical treatment. Level I elements are located throughout the combat and communications zones. These elements include the combat lifesavers, combat medics, and battalion aid station. Some or all of these elements are found in maneuver, combat support, and combat service support units. When Level I is not present in a unit, this support is

provided to that unit by Level II medical units. (2) *Level II*—Duplicates Level I medical care and expands services available by adding dental, laboratory, x-ray, and patient-holding capability. Emergency care, advanced trauma management, including beginning resuscitation procedures, is continued. No general anesthesia is available; if necessary, additional emergency measures dictated by the immediate needs are performed. Level II units are located in the combat zone and the communications zone. Level II medical support may be provided by a clearing station established by a forward support medical company; division support medical company, or area support medical companies located in the corps area and in the communications zone. This is also referred to as division-level medical care. (3) *Level III*—This level of support expands the support provided at Level II. Casualties who are unable to tolerate and survive movement over long distances will receive surgical care in hospitals as close to the division rear boundary as the tactical situation will allow. Surgical care may be provided within the division area under certain operational conditions. Level III characterizes the care that is provided by combat support hospitals. Operational conditions may require Level III units to locate in offshore support facilities, third country support base, or in the communications zone. (4) *Level IV*—This level of care is provided in an echelons above corps (communications zone-level) combat support hospital which are staffed and equipped for general and specialized medical and surgical treatment. This level of care provides further treatment to stabilize those patients requiring evacuation to continental United States. This level also provides area health service support to soldiers within the communications zone. (5) *Level V*—In this level of care, the casualty is treated in continental United States-based hospitals, staffed and equipped for the most definitive care available within the health service support system. Hospitals in the continental United States base represent the final level of HSS.

lines of patient drift Natural routes along which wounded soldiers may be expected to go back for medical care from a combat position.

LOC lines of communication

LR lactated Ringer's

LZ landing zone

MA mortuary affairs

MASF See mobile aeromedical staging facility.

MASH mobile Army surgical hospital

mass casualty Any large number of casualties produced in a relatively short period of time, usually as the result of a single incident such as a military aircraft accident, hurricane, flood, earthquake, or armed attack, that exceeds local logistical support capabilities. (Joint Pub 1-02)

MAST Military Assistance to Traffic and Safety

MC Medical Corps

MC4 medical communications for combat casualty care

MCM multicommand manual

MCW minimal care ward

MDMP military decision-making process

MDT medical detachment, telemedicine

med medical

MEDCEN medical center

MEDCOM medical command

medical equipment set A chest containing medical instruments and supplies designed for specific table of organization and equipment units or specific missions.

medical evacuation The process of moving any person who is wounded, injured, or ill to and/or between medical treatment facilities while providing en route medical care.

medical intelligence That category of intelligence resulting from collection, evaluation, analysis, and interpretation of foreign medical, bioscientific, and environmental information which is of interest to strategic planning and to military medical planning and operations for the conservation of the fighting strength of friendly forces and the formation of assessments of foreign medical capabilities in both military and civilian sectors. (Joint Pub 1-02)

medical noneffective rate Is a measure very frequently used in military medicine and measures the prevalence of noneffectiveness with noneffectiveness being defined as *excused from duty for medical reasons*. This rate does not generally include time off for clinic visits and days off, other than hospitalization, for illness.

medical regulating The actions and coordination necessary to arrange for the movement of patients through the levels of care. This process matches patients with a medical treatment facility that has the necessary health service support capabilities, and it also ensures that bed space is available. (Joint Pub 1-02)

medical regulating officer The medical regulating officer functions as the responsible individual at command and control headquarters for receiving and consolidating medical evacuation requests. These requests are initiated by the division medical operations center or subordinate hospitals. The medical regulating officer also maintains the current patient status, bed status, and surgical backlog at subordinate hospitals.

medical surveillance The ongoing, systematic collection, analysis, and interpretation of health data essential to the planning, implementation, and evaluation of public health practice, closely integrated with the timely dissemination of these data to those who need to know. (Upon approval of this revision, this term and its definition will be included in Joint Pub 1-02.)

medical threat (1) A collective term used to designate all potential or continuing enemy actions and environmental situations that could possibly adversely affect the combat effectiveness of friendly forces, to include wounding, injuries, or sickness incurred while engaged in a joint operation. (Joint Pub 1-02) (2) A composite of all ongoing potential enemy actions and environmental conditions (diseases and nonbattle injuries) that may render a soldier combat ineffective.

medical treatment facility (MTF) Any facility established for the purpose of providing medical treatment. This includes battalion aid stations, division clearing stations, dispensaries, clinics, and hospitals. (2) A facility established for the purpose of furnishing medical and/or dental care to eligible individuals. (3) Denotes a facility established for the purpose of providing health services to authorized personnel. (Joint Pub 1-02)

medically immature theater A theater in which health service support capability is insufficient to support the operational commander's operational plan, including the theater evacuation policy, without undue risk of increased morbidity and mortality for soldiers.

medically mature theater A theater in which health service support capability is sufficient to support the operational commander's operational plan, within the theater evacuation policy, while minimizing the risk of morbidity and mortality for soldiers.

MEDLOG medical logistics

MEDLOG-D medical logistics-division

MEDMNT medical maintenance

MES See medical equipment set.

METT-TC mission, enemy, terrain and weather, troops and support available, time available, and civil considerations

MH mental health

MHS military health system

MIPB medical intelligence preparation of the battlefield

missing in action This term describes battle casualties whose whereabouts or fate cannot be determined and who are not known to be in an unauthorized absence status (desertion or absent without leave).

mission-oriented protective posture (MOPP) A flexible system for protection against NBC contamination. This posture requires personnel to wear only that individual protective clothing and equipment consistent with the threat, work rate imposed by the mission, temperature, and humidity. There are five levels of MOPP (zero through 4). MOPP 4 offers the greatest protection but also degrades mission performance the most.

MIW multiple injury wound

mm millimeters

MMMB medical materiel management branch

MMS medical materiel set

MMTF medical multifunctional task force

MOA memorandum(s) of agreement

mobile aeromedical staging facility (MASF) The mobile aeromedical staging facility is a United States Air Force staging facility employed at forward airfields in the combat zone to provide temporary staging capability for preparation of patients being evacuated from corps to echelons above corps hospitals. The mobile aeromedical staging facility is employed to ensure patients are prepared for aircraft loading with the main focus of reducing aeromedical evacuation aircraft ground time.

mobility The percentage of organic equipment and personnel that can be moved in a single lift using organic vehicles.

MOOTW military operations other than war

MOPP See mission-oriented protective posture.

MOS military occupational specialty

MOU memorandum(s) of understanding

MPM Medical Planning Module

Mr. Mister

MRE meals, ready-to-eat

MRI Medical Reengineering Initiative

MRO medical regulating office

MROE medical rules of eligibility

Ms. Miss/Mrs.

MS Medical Service Corps

MSB main support battalion

MSCA military support to civilian authorities

MSE mobile subscriber equipment

MSMC main support medical company

MTF See medical treatment facility.

MTW major theater war

MV mechanical ventilator
MWD military working dog
MWR morale, welfare, and recreation

NAFI Nonappropriated Fund Instrumentality
NATO North Atlantic Treaty Organization
NBC nuclear, biological, and chemical
NBI nonbattle injury
NCO noncommissioned officer
NDMS national disaster medical system
NEO noncombatant evacuation operations
NGO nongovernmental organization
NICP national inventory control point

nontransportable patient This is a patient whose medical condition is such that he could not survive further evacuation to the rear without surgical intervention to stabilize his medical condition.

NP neuropsychiatric
NSN national stock number

OCONUS outside continental United States
OEH occupational and environmental health
OMF originating medical facility
OPCON See operational control.

operation order (OPORD) A directive issued by a commander to subordinate commanders for effecting the coordinated execution of an operation, including tactical movement orders.

operation overlay Is an overlay showing the location, size, and scheme of maneuver/fires of friendly forces involved in an operation. As an exception, it may indicate predicted movements and locations of enemy forces.

operation plan (OPLAN) A plan for a military operation. It covers a single operation or series of connected operations to be carried out simultaneously or in succession. It implements operations derived from the campaign plan. When the time and/or conditions under which the plan is to be placed in effect occur, the plan becomes an operations order.

operations security All measures taken to maintain security and achieve tactical surprise. It includes countersurveillance, physical security, signal security, and information security. It also involves the identification and elimination or control of indicators which can be exploited by hostile intelligence organizations.

operational command The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational or tactical control as may be deemed necessary. It does not, of itself, include administrative command or logistical responsibility.

operational control (OPCON) The authority delegated to a commander to direct forces provided him so he can accomplish specific missions or tasks that are usually limited by function, time, or location; to deploy units concerned; and to retain or assign tactical control of these units. It does not include authority to assign separate employment of components of the units concerned, nor does it, of itself, include administrative or logistics control.

OPLAN See operation plan.

OPORD See operation order.

OPSEC See operational security.

OPTEMPO operational tempo

OR operating room

order A communication, written, oral, or by signal, that conveys instructions from a superior to a subordinate. In a broad sense, the term order and command are synonymous. However, an order implies discretion as to the details of execution, whereas a command does not.

organic Assigned to and forming an essential part of a military organization; an element normally shown in the unit's table of organization and equipment. (*See also* assign; attach; operational control.)

OSIS open source information system

OT occupational therapy

outpatient Is the term applied to a person receiving medical/dental examination and/or treatment from medical personnel and in a status other than being admitted to a hospital. Included in this category is the person who is treated and retained (held) in a medical treatment facility (such as an Level II facility [clearing station]) other than a hospital.

PA physician assistant

PAD patient administration

PAH polynuclear aromatic hydrocarbons

PAHO Pan American Health Organization

pam pamphlet

passage of lines Passing one unit through the position of another, as when elements of a covering force withdraw through the forward edge of the main battle area, or when an exploiting force moves through elements of the force that conducted the initial attack. A passage may be designated as a forward or rearward passage of lines.

patient (1) A sick, injured or wounded soldier who receives medical care or treatment from medically trained personnel. (2) A sick, injured, wounded, or other person requiring medical/dental care or treatment. (Joint Pub 1-02)

patient decontamination The removal and/or the neutralization of hazardous levels of nuclear, biological, and chemical contamination from patients at a medical treatment facility. Patient decontamination is performed under the supervision of medical personnel to prevent further injury to the patient and to maintain the patient's health status during the decontamination process. Patient decontamination serves multiple purposes; it protects the patient from further injury, it prevents exposing medical personnel to the contamination, and it prevents contamination of the medical treatment facility.

patient estimates Are derived from the casualty estimate (prepared by the S1/G1) by the combat health support planner. (Refer to the definition of *casualty* as stated above.) Not all classifications of casualties are *medical casualties* (such as killed in action, absent without leave, or detained persons). Patient estimates only encompass *medical casualties*.

patient movement The act or process of moving a sick, injured, wounded, or other person to obtain medical and/or dental care or treatment. Decisions made in this process involve coordination between the sending medical treatment facility, the gaining medical treatment facility, and the appropriate Patient Movement Requirements Center. (Joint Pub 1-02)

patient movement items (PMI) These are the medical equipment and supplies required to support the patient during evacuation. The patient movement items accompany a patient throughout the chain of evacuation for the originating medical facility to the destination medical treatment facility.

patient movement requirements center A joint activity that coordinates patient movement. It is the functional merging of joint medical regulating processes, Services medical regulating processes, and coordination with movement components for patient evacuation. This may be joint, reporting to the joint task force surgeon; theater, reporting to the joint task force surgeon; theater, reporting to the theater surgeon; or global, reporting to the United States Transportation Command Surgeon. (JP 1-02) (*See also* Global Patient Movement Requirements Center and Theater Patient Movement Requirements Center.)

PC patient condition code

PCA patient care area

PID pelvic inflammatory disease

PIR priority information requirements

PMI *See* patient movement items.

PMM preventive medicine measures

POC point of contact

POL petroleum, oils and lubricants

potable water Water that is safe for human consumption. Potable water is free from disease-causing organisms and excessive amounts of mineral or organic matter, toxic chemicals, and radioactive materials. The water may not be pleasing to the taste.

POW prisoner of war

preventive medicine (PVNTMED) The anticipation, prediction, identification, prevention, and control of communicable diseases (including vector-, food- and waterborne diseases), illnesses, injuries and diseases due to exposure to occupational and environmental threats, including nonbattle injury threats, combat stress responses, and other threats to the health and readiness of military personnel and military units.

PROFIS Professional Filler System

protection This is the preservation of the fighting potential of a force so that commander can apply the maximum force at the decisive time and place. Protection has four components: force protection, field discipline, safety, and fratricide avoidance. (*See also* force protection, field discipline, safety, and fratricide avoidance.)

psychological operations (PSYOP) Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of psychological operations is to induce or reinforce attitudes and behavior favorable to the originator's objective.

PSYOP *See* psychological operations.

PT physical therapy

pub publication

PVNTMED *See* preventive medicine.

QAP Quadripartite Advisory Publication

QSTAG *See* Quadripartite Standardization Agreement.

Quadripartite Standardization Agreement (QSTAG) The acronym for American, British, Canadian, and Australian Organizations standardization agreements. The ABCA member nations are allied together for military interoperability in both equipment and methods of operations. As each QSTAG is adopted, it becomes part of each nation's unilateral procedures and is incorporated into national doctrinal and procedural publications.

rationalization Any action that increases the effectiveness of allied forces through more efficient or effective use of defense resources committed to the alliance. Rationalization includes consolidation, reassignment of nation priorities to higher alliance needs, standardization, specialization, mutual support or improved interoperability, and greater cooperation. Rationalization applies to both weapons/materiel resources and nonweapons military matters.

RBC red blood cell

reconstitution The total process of keeping the force supplied with various supply classes, services, and replacement personnel and equipment required to maintain the desired level of combat effectiveness and of restoring units that are not combat effective to the desired level of combat effectiveness through the replacement of critical personnel and equipment. Reconstitution encompasses unit regeneration and sustaining support.

resuscitative care (1) Generally, advanced trauma management care and surgery limited to the minimum required to stabilize a patient for transportation to a higher level of care. (2) Resuscitative care is the aggressive management of life- and limb-threatening injuries. Interventions include emergency medical treatment, advanced trauma management, and lifesaving surgery to enable the patient to tolerate evacuation to the next level of care.

return to duty (RTD) A patient disposition which, after medical evaluation and treatment when necessary, returns a soldier for duty in his unit.

RFR radio frequency radiation

RMC regional medical commands

RMW regulated medical waste

ROE rules of engagement

RSI rationalization, standardization, and interoperability

RSO&I reception, staging, onward movement, and integration

RTD See return to duty.

S1 Adjutant, US Army

S2 Intelligence Officer (US Army)

safety Safety is the third component of protection. Operational conditions often impose significant risks to soldiers' lives and health and make equipment operation difficult. Command attention to safety and high levels of discipline lessen those risks, particularly as soldiers reach exhaustion. Safe operations come from enforcing standards during training. While taking calculated risks, commanders assume the obligation to embed safety in the conduct of all operations. (*See also* protection.)

SBCT Stryker Brigade Combat Team

SECDEF Secretary of Defense

SF special forces

SFMS special forces medical sergeant

SFOB special forces operating base

SI seriously ill

SIMLM See single integrated medical logistics manager.

single integrated medical logistics manager (SIMLM) When two or more Services are operating within the commander's-in-chief area of responsibility a Service may be designated as the SIMLM. The SIMLM system encompasses the provision of medical supplies, medical equipment

maintenance and repair, blood management, and optical fabrication to all joint forces within the theater of operations.

SJA Staff Judge Advocate

SMART special medical augmentation response team

SMART-AIT special medical augmentation response team—aeromedical isolation

SMART-B special medical augmentation response team—burn

SMART-HS special medical augmentation response team—health systems assessment and assistance

SMART-MC3T special medical augmentation response team—medical command, control, communications, and telemedicine

SMART-NBC special medical augmentation response team—nuclear/biological/chemical

SMART-PC special medical augmentation response team—pastoral care

SMART-PM special medical augmentation response team—preventive medicine

SMART-SM special medical augmentation response team—stress management

SMART-TCC special medical augmentation response team—trauma/critical care

SMART-V special medical augmentation response team—veterinary

SME subject matter expert

SOCM special operations combat medic

SOF special operations forces

SOFA Status of Forces Agreement

SOP standing operating procedures

spt support

stabilized patient (1) Patient may require emergency intervention, but not surgery, within the next 24 hours. The patient's condition is characterized by a secure airway, control or absence of hemorrhage, shock adequately treated, vital signs stable, and major fractures immobilized. Stabilization is a precondition of extended duration evacuation (up to 24 hours). This includes, but is not limited to: (a) Ventilator. (b) Physiologic monitors. (c) Skull free of air or functioning drains in place. (d) Chest tube functional or x-ray free of pneumothorax. (e) Oxygen requirement is acceptable. (f) Functioning nasogastric tube or absence of ileus. (g) Bone fixator is acceptable. (h) Plaster bi-valved. (i) Pulses present after vascular repair. Despite these definitive example characteristics, there are patients who do not fit these descriptions, and yet may be considered stabilized—as always, this clinical decision is decided on between the originating and receiving physicians. (2) Patient whose condition may require emergency interventions within the next 24 hours. The patient's condition is characterized by a minimum of a secured airway, control or absence of hemorrhage, treated shock, and immobilized fractures. Stabilization is a necessary precondition for further evacuation. (3) A patient whose airway is secured, hemorrhage is controlled, shock is treated, and fractures are immobilized.

stable patient (1) Patient whose condition is not expected to change within the next 24-hour period. Includes but is not limited to: (a) All minimal care and most intermediate care patients. (b) Physiologic monitor acceptable, vital sign requirement is acceptable (no more than every 4 hours). (c) Litter acceptable. (d) Foley catheter acceptable. (e) Gastrointestinal suction functional, or no ileus or obstruction. (2) A patient whose condition is not predicted to change within the next 24 hour period. (3) A patient for whom no in-flight medical intervention is expected but the potential for medical intervention exists. (Generally assumes an intermediate care or minimal care patient who could tolerate a 24 hour bed-to-bed move with care limited to IV and Foley catheters)

maintenance and dressing changes. This care can be provided to up to 40 stable patients en route by two registered nurses and 3 enlisted medical personnel.

staff channel This channel is the staff to staff link between headquarters. It is for coordination and transmission of information.

STANAG See standardization agreement.

standardization The process of developing concepts, doctrines, procedures, and designs to achieve and maintain the most effective levels of compatibility, interoperability, interchangeability, and commonality in the fields of operations, administration, and materiel.

standardization agreement (STANAG) Agreements among allied nations (NATO) to ensure military interoperability in both equipment and methods of operations. As each STANAG is adopted, it becomes part of each nation's unilateral procedures and is incorporated into national doctrinal and procedural publications.

STD sexually transmitted disease(s)

strategic aeromedical evacuation That phase of evacuation that provides airlift for patients from a theater to another theater or CONUS.

SU situational understanding

SVOC semi-volatile organic compounds

TAA Total Army Analysis

tactical aeromedical evacuation That phase of evacuation that provides airlift for patients from the combat zone to points outside the combat zone, and between points within the communications zone. (Joint Pub 1-02)

tailgate medical support An economy of force device employed primarily to retain maximum mobility during movement halts or to avoid the time and effort required to set up a formal, operational treatment facility (for example, during rapid advance and retrograde operations). Tailgate medical support consists of dispensing medications, bandaging and splinting, and performing simple emergency life sustaining procedures. It is literally performed at the *tailgate* of a vehicle or in a structure or other area using an easily reached set of medical supplies and equipment to ensure promptness and efficiency. Mobility of the unit is not affected and only three to five minutes are required to open or close this service.

TAMMIS Theater Army Medical Management Information System

task organization Is a temporary grouping of forces designed to accomplish a particular mission. Task organization involves the allocation or distribution of available forces to a subordinate headquarters by placing these forces either attached, under operational control to, or in direct support of the subordinate headquarters. Staff planners must distinguish between that support and augmentation which is provided to any or all the divisions, and additional support or augmentation which may be required by the heavy or light division when conducting heavy-light operations.

TB MED Technical Bulletin, Medical

TBSA total body surface area

TDA table(s) of distribution and allowances

technical channel Commanders and staffs use this channel to send technical instructions between commands. Technical changes and decisions may affect the mission's accomplishment; therefore, you must inform your commander of any technical change. He can then accurately assess the impact of these changes and take appropriate action.

telemedicine The use of electronic communications and information technologies to provide or support medical/clinical care at a distance.

TF task force

theater evacuation policy A command decision indicating the length in days of the maximum period of noneffectiveness that patients may be held within the command for treatment. Patients who, in the opinion of a responsible medical officers, cannot be returned to duty status within the period prescribed are evacuated by the first available means, provided the travel involved will not aggravate their disabilities.

theater of operations That portion of an area of conflict necessary for the conduct of military operations, either offensive or defensive, to include administration and logistical support.

Theater Patient Movement Requirements Center (TPMRC) The TPMRC is a joint agency normally located at or near the unified theater headquarters. The theater surgeon supervises the functions of this office. The functions of this officer are: maintaining direct liaison with the Global Patient Movement Requirements Center (GPMRC), the medical regulating officers of component Services, and the transportation agencies which furnish the means of evacuation; obtaining periodic reports of available beds from the Service medical regulating officers; and selecting hospitals based on the reported bed availability to receive patients within echelons above corps.

TIM See toxic industrial material.

Time-Phased Force Deployment Data The computer supported data base portion of an operation plan that contains time-phased force data, nonunit-related cargo and personnel data, and movement data for the operation plan. Information includes in-place units, prioritized arrival of units deployed to support the operation plan, routing of forces to be deployed, movement data associated with deploying forces, estimates of nonunit-related cargo and personnel movements to be conducted concurrently with deployment of forces, and estimates of transportation requirements.

TM technical manual

TMIP Theater Medical Information Program

TO theater of operations

TOE table(s) of organization and equipment

toxic industrial material (TIM) Materials such as chemicals and radioactive material from industrial processes that pose hazards to individuals.

TPMRC See Theater Patient Movement Requirements Center.

TRAC2ES US Transportation Command Regulating and Command and Control Evacuation System

transient patient A patient en route from one medical treatment facility to another medical treatment facility.

transportable patient Patient unlikely to need care beyond those capabilities provided en route for the duration of the evacuation.

triage The medical sorting of patients according to type and seriousness of injury, likelihood of survival, and the establishment of priority for treatment and/or evacuation to assure medical care of the greatest benefit to the largest number. The categories are: **MINIMAL (OR AMBULATORY)**—those who require limited treatment and can be returned to duty; **IMMEDIATE**—patients requiring immediate care to save life or limb; **DELAYED**—patients who, after emergency treatment, incur little additional risk by delay or further treatment; and **EXPECTANT**—patients so critically injured that only complicated and prolonged treatment will improve life expectancy. (2) The evaluation and classification of casualties for purposes of treatment and evacuation. It consists of the immediate sorting of patients according to type and seriousness of injury and likelihood of survival, and the establishment of priority for treatment and evacuation to assure medical care of the greatest benefit to the largest number. (Joint Pub 1-02)

FM 4-02

TSOP tactical standing operating procedure

TTP tactics, techniques, and procedures

UGR unitized group ration

UH utility helicopter

UN United Nations

unconventional warfare A broad spectrum of military and paramilitary operations conducted in an enemy-held, enemy-controlled, or politically sensitive territory. Unconventional warfare includes, but is not limited to, the interrelated fields of guerrilla warfare, evasion and escape, subversion, sabotage, and other operations of a low visibility, covert, or clandestine nature. These interrelated aspects of unconventional warfare may be prosecuted singly or collectively by predominantly indigenous personnel, usually supported and directed in varying degrees by (an) external sources during all conditions of war or peace.

UNHCR United Nations High Commissioner for Refugees

unstable patient Clinically does not fit either stable or stabilized parameters. These patients are usually deteriorating in biological activity. Emergency treatment intervention is anticipated in the next 12 to 24 hours. Complications are expected. May always be transported to get to needed capability.

UO urban operations

US United States

US Army Field Medical Card A card (DD Form 1380) used to record the medical diagnosis, medication, and treatment given for all illnesses or injuries (including chemical agent injuries) and, if known, the contaminating agent. It is also used to record the disposition of casualties who are dead on arrival at the battalion aid or division clearing station or who died of wounds, injury, or illness.

USACHPPM United States Army Center for Health Promotion and Preventive Medicine

USAF United States Air Force

USAFORSCOM United States Army Forces Command

USAID United States Agency for International Development

USAISR United States Army Institute of Surgical Research

USAMEDCOM United States Army Medical Command

USAMEDDC&S United States Army Medical Department Center and School

USAMMA United States Army Medical Materiel Agency

USAMRMC United States Army Medical Research and Materiel Command

USAVETCOM United States Army Veterinary Command

USCG United States Coast Guard

USMC United States Marine Corps

USN United States Navy

USTRANSCOM United States Transportation Command

UW unconventional warfare

VA Department of Veterans Affairs

VET veterinary

VOC volatile organic compound

VSI very seriously ill

walking patient A patient not requiring a litter while in transit. (Joint Pub 1-02). Also referred to as an

ambulatory patient.

warning order (WARNO) A preliminary notice of an action or order that is to follow. Usually issued as a brief, oral, or written message designed to give subordinates time to make necessary plans and preparations.

WARNO See warning order.

WHO World Health Organization

WIA wounded in action

WIN warfighter information network

WMD weapons of mass destruction

wounded in action A casualty category applicable to a hostile casualty, other than the victim of a terrorist activity, who has incurred an injury due to an external agent or cause. The term encompasses all kinds of wounds and other injuries incurred in action, whether there is a piercing of the body, as in a penetration or perforated wound, or none, as in the contused wound. These include fractures, burns, blast concussions, all effects of biological and chemical warfare agents, and the effects of an exposure to ionizing radiation or any other destructive weapon or agent. The hostile casualty's status may be very seriously ill or injured, seriously ill or injured, incapacitating illness or injury, or not seriously injured. (Joint Pub 1-02)

WPSM warfighter physiological status monitor

ZULU Greenwich Mean Time

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